

# SMD COMMON MODE LINE FILTER

## CM02 SERIES



### FEATURES:

- Ferrite Core bobbin construction
- High frequency and Large current
- Excellent Mechanical Strength
- Excellent Solderability
- Excellent Frequency performance
- Low Profile and Low cost

### COMMON APPLICATIONS:

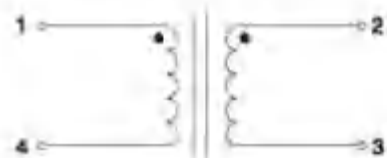
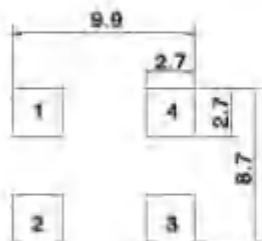
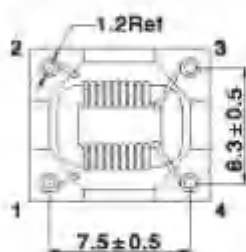
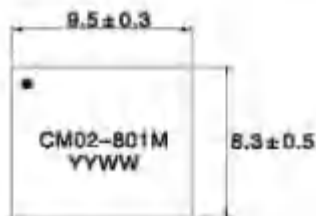
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

### ELECTRICAL CHARACTERISTICS@25°C

Part Number	Inductance (μH) Typ.	Impedance (Ω) ± 25% @ 100MHz	Rated current (A)	DCR (mΩ) Max
CM02-501M	5.0	500	5.0	5.5
CM02-801M	8.0	800	3.5	13.2
CM02-102M	11.0	1000	2.5	30.0

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions(mm)



Note:

- Inductance Testing: 1KHz 1V HP4284A
- Z test with HP4191A or HP4395A
- RDC:QuadTach 1880 Milliohmmeter
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Resistance to soldering heat:260°C for 10 seconds
- Marking: Part number and date code

Note:All specifications subject to change without notice.



# COMMON MODE CHOKES FOR LINE FILTER

## CM4001 SERIES

### FEATURES:

- Current rating up to 1.4A
- Inductance range: 120 to 5000uH
- Frequency range to 200 MHz
- RoHS compliant

### OPTIONS:

- Packaging: Tape & Reel is standard
- Bulk packaging available for smaller quantities

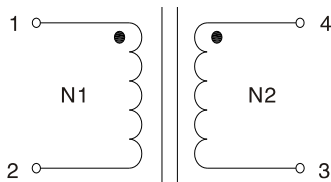
### COMMON APPLICATIONS:

- EMI suppression
- DC-DC Converter
- Input/Output line filter
- RFI noise suppression

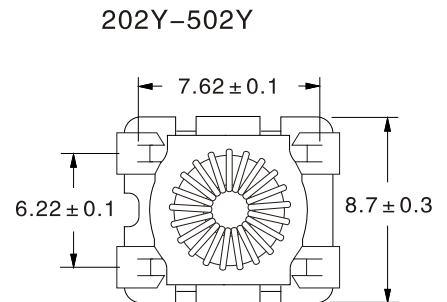
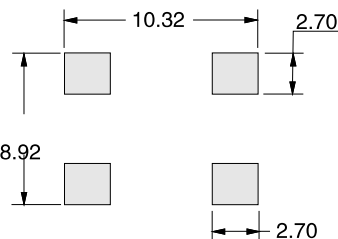
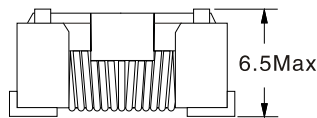
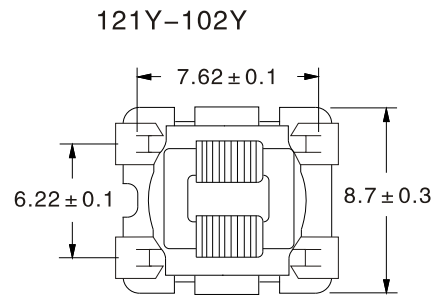
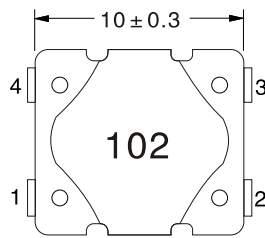
## ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) μ H ± 40%	Lk uH(Max)	DCR(Ω) each winding	Impedance(Z)		Rated voltage (Vdc)	Rated current (A)
				Freq. range (MHz)	Min Value (Ω)		
CM4001-121Y	120	1.45	0.025	10-200	200	50	1.40
CM4001-251Y	250	3.2	0.035	5-100	400	50	1.19
CM4001-501Y	500	5.6	0.070	2-50	800	50	0.84
CM4001-102Y	1000	12	0.180	1-40	1400	50	0.52
CM4001-202Y	2000	0.23	0.270	0.5-15	2000	50	0.40
CM4001-302Y	3000	0.26	0.330	0.5-10	3000	50	0.35
CM4001-402Y	4000	0.27	0.550	0.5-5	4000	50	0.30
CM4001-472Y	4700	0.28	1.000	0.6-3	6200	50	0.25
CM4001-502Y	5000	0.29	0.620	0.5-3	5000	50	0.25

## SCHEMATIC



## PHYSICAL CHARACTERISTICS(Dimensions:mm)



Recommended Layout

### NOTES:

1. Temperature Rise: 45°C at rated current
2. Hi-Pot: 1000 Vrms, 60Hz, 3mA, 1min  
@ 120-1000uH  
300 Vrms, 60Hz, 3mA, 1min  
@ 2000-5000uH
3. Operating Temperature:  
-40°C to +105°C (Temperature rise included)
4. Storage Temperature:  
-40°C to +105°C  
Solderability: 245°C for 5 sec
5. Core Material ..... Ferrite
6. Base ..... Phenolic
7. Wire ..... Enamelled copper
8. Terminal coating ..... Sn
9. Packaging ..... 800 pcs. per 13-inch reel

Note: All specifications subject to change without notice.

## COMMON MODE LINE CHOKES – EE STYLES

### EE25 Series

- Common mode chokes are used to reduce AC line conducted interference produced by switching power supplies.
- This configuration produces opposing magnetic fluxes in the core that serve to cancel in-phase noise signals appearing across the AC line.
- This mode allows much more filtering capability in a given core size than would be possible using differential filtering alone. Use of common mode chokes therefore reduces component count as well as inductor size.
- Combining both common and differential mode chokes gives the power supply designer the added flexibility required to adjust the filtering to meet FCC, VDE, and other requirements as well as optimize the circuit for the particular noise levels and frequencies produced by each power supply design.



#### FEATURES:

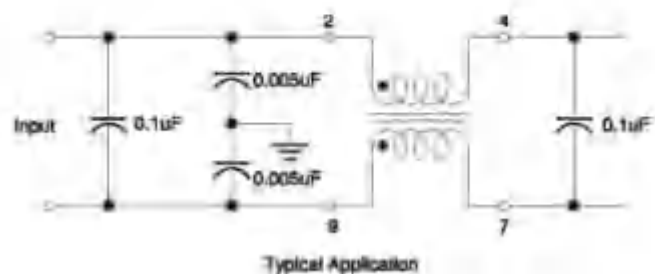
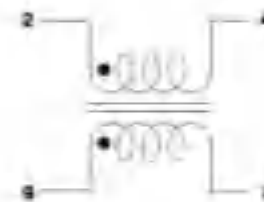
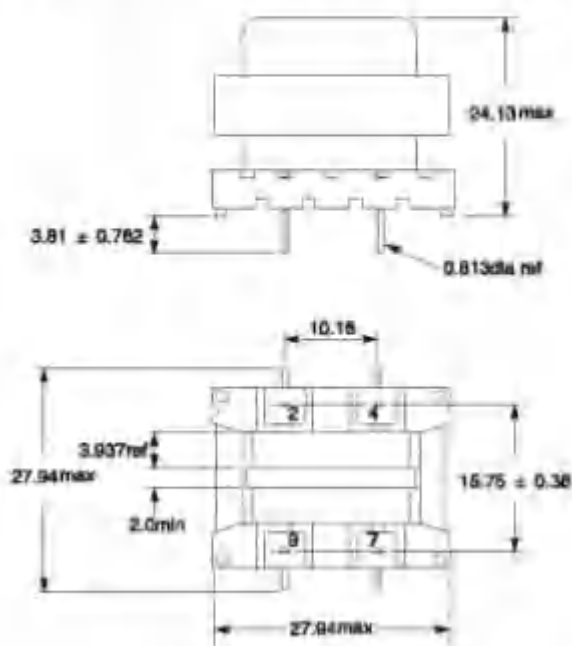
- 3 mm creepage and clearance from all terminations to the core
- 3750 Vrms, one minute isolation between windings
- UL1448 Class B (130°C) Insulation System (UL File E83628)
- Ambient temperature range: -40°C to +85°C

#### STANDARD SPECIFICATION@25°C:

Part Number	Inductance (µH) Min 10Hz, 0.1V	DCR (Ω) Max	Current range (A)
EE25-181Y-4.0A	188	0.018	4.0
EE25-301Y-3.0A	300	0.029	3.0
EE25-481Y-2.5A	468	0.044	2.5
EE25-731Y-2.0A	731	0.069	2.0
EE25-112Y-1.5A	1100	0.105	1.5
EE25-212Y-1.25A	2100	0.190	1.25
EE25-282Y-1.0A	2800	0.270	1.0
EE25-362Y-0.75A	3900	0.390	0.75
EE25-892Y-0.5A	9800	0.980	0.5

#### PHYSICAL CHARACTERISTICS

#### TECHNICAL INFORMATION:



Typical Application

# COMMON MODE LINE CHOKES – EE STYLES HIGH INDUCTANCE

## EE25H Series

- Common mode chokes are used to reduce AC line conducted interference produced by switching power supplies.
- This configuration produces opposing magnetic fluxes in the core that serve to cancel in-phase noise signals appearing across the AC line.
- This mode allows much more filtering capability in a given core size than would be possible using differential filtering alone. Use of common mode chokes therefore reduces component count as well as inductor size.
- Combining both common and differential mode chokes gives the power supply designer the added flexibility required to adjust the filtering to meet FCC, VDE, and other requirements as well as optimize the circuit for the particular noise levels and frequencies produced by each power supply design.



### FEATURES:

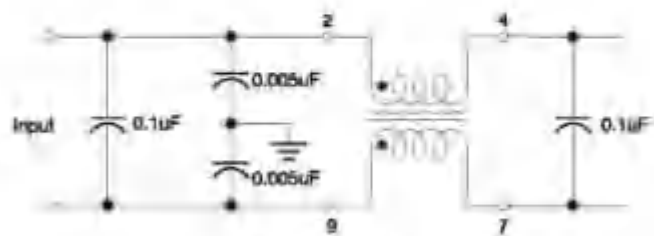
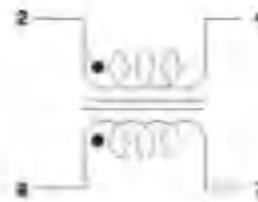
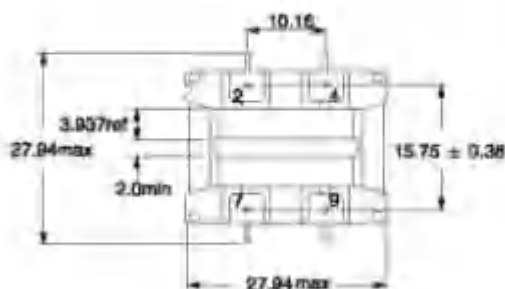
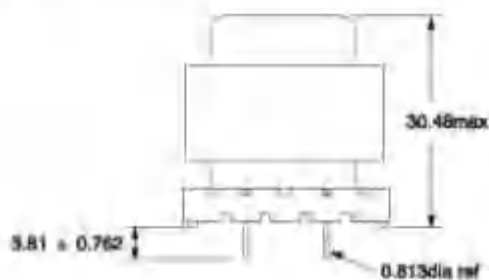
- 3 mm creepage and clearance from all terminations to the core
- 3750 Vrms, one minute isolation between windings
- UL 1446 Class B (130°C) Insulation System (UL File E83528)
- Ambient temperature range: -40°C to +85°C

### STANDARD SPECIFICATION@25°C:

Part Number	Inductance (μH) Min 10Hz,0.1V	DCR (Ω)Max	Current range (A)
EE25H-281Y-4.0A	286	0.022	4
EE25H-501Y-3.0A	508	0.037	3
EE25H-791Y-2.5A	796	0.055	2.5
EE25H-122Y-2.0A	1240	0.087	2
EE25H-182Y-1.5A	1870	0.130	1.5
EE25H-362Y-1.25A	3600	0.230	1.25
EE25H-482Y-1.0A	4800	0.350	1
EE25H-662Y-0.75A	6600	0.50	0.75
EE25H-163Y-0.5A	16800	1.260	0.5

### PHYSICAL CHARACTERISTICS

### TECHNICAL INFORMATION:



Typical Application

# COMMON MODE POWER LINE CHOKE ET2018H SERIES



## FEATURES:

- Closed rectangular ferrite core
- 2 section winding for excellent high frequency performance
- 1% stray inductance for symmetrical interference suppression

## APPLICATIONS:

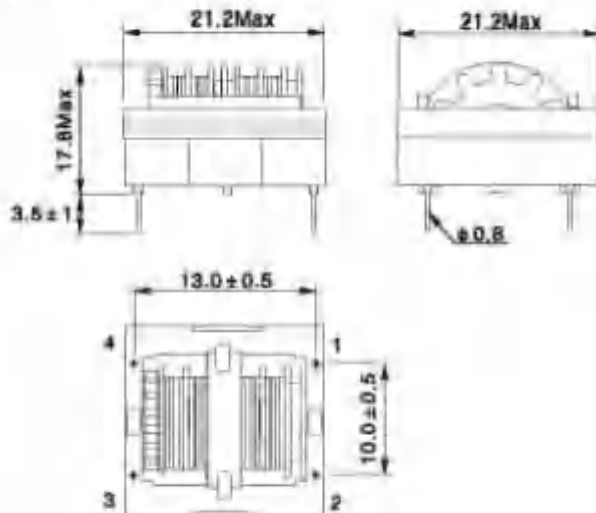
- Switch mode power supplies
- Suppression of common mode noise
- Compact switch mode power supplies
- Electronic ballast applications(LED bulb)
- Lighting

## ELECTRICAL CHARACTERISTICS:

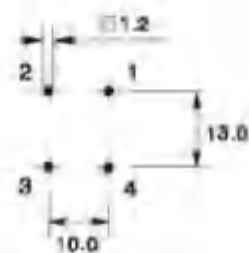
Part Number	L (mH)Min	Rated Current (A)	RDC max. (Ω)
ET2018H-821Y	0.82	2.0	0.066
ET2018H-182Y	1.8	1.5	0.15
ET2018H-272Y	2.7	1.2	0.225
ET2018H-332Y	3.3	1.1	0.25
ET2018H-392Y	3.9	1.0	0.25
ET2018H-562Y	5.6	0.8	0.4
ET2018H-682Y	6.8	0.8	0.48
ET2018H-103Y	10	0.6	0.72
ET2018H-183Y	18	0.5	1.17
ET2018H-223Y	22	0.4	1.8
ET2018H-333Y	33	0.3	2.0

## PHYSICAL CHARACTERISTICS:

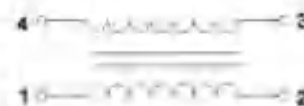
Dimensions 1



Hole pattern(in mm)



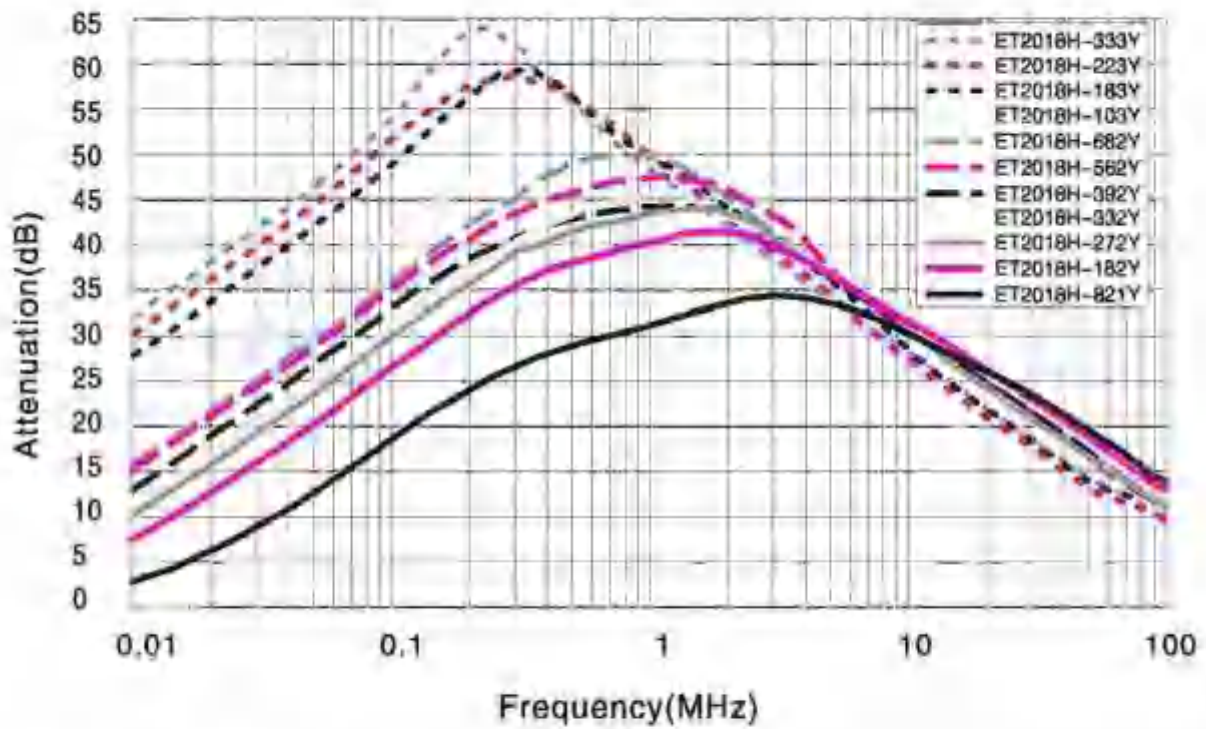
Winding



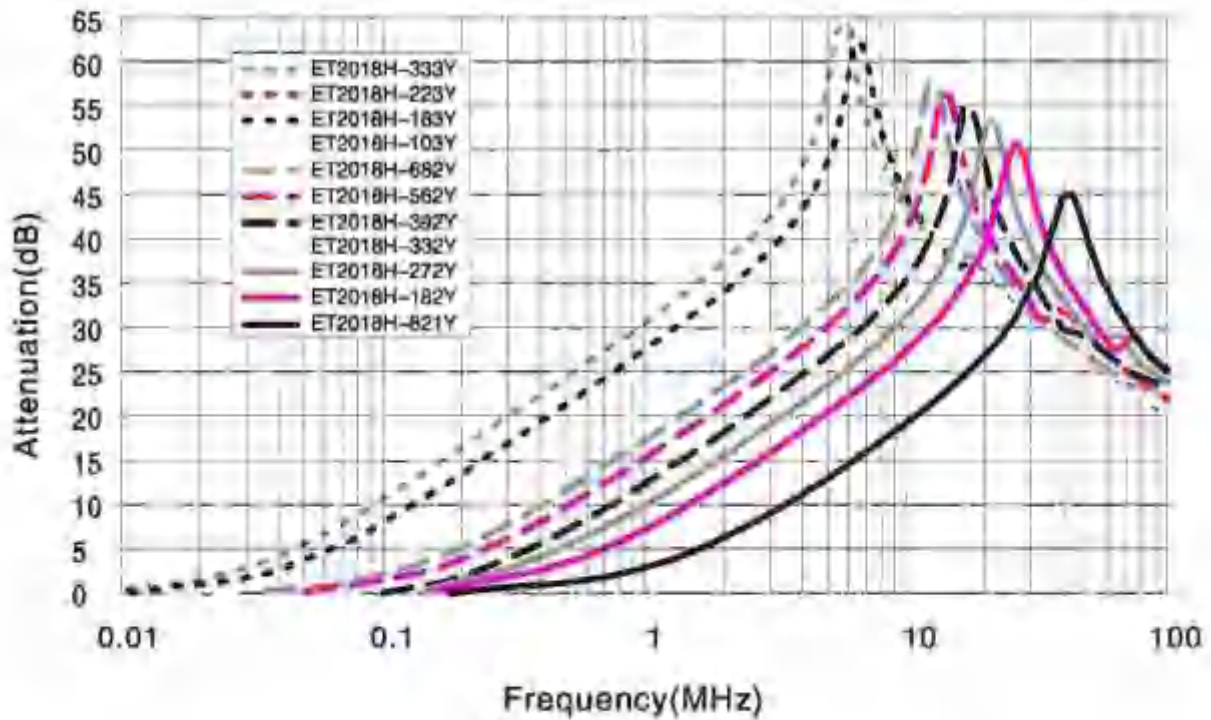
Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....2000V
- Operating temperature.....-25 ℃ to +125 ℃
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE ET2422H SERIES



## FEATURES:

- Closed rectangular ferrite core
- 2 section winding for excellent high frequency performance
- 1% stray inductance for symmetrical interference suppression

## APPLICATIONS:

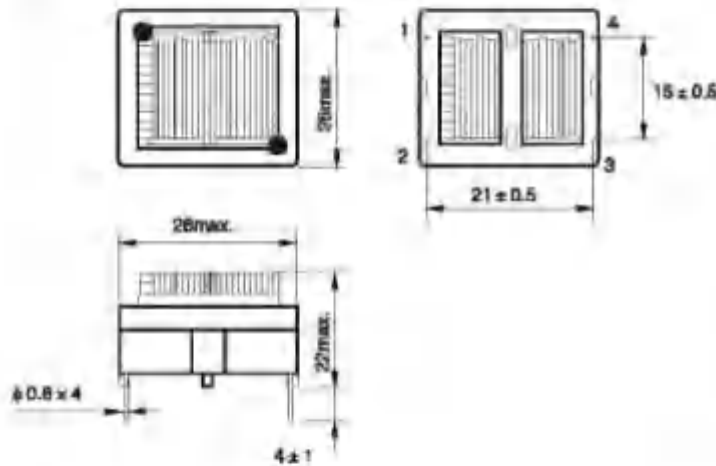
- Switch mode power supplies
- Suppression of common mode noise
- Compact switch mode power supplies
- Electronic ballast applications(LED bulb)
- Lighting

## ELECTRICAL CHARACTERISTICS:

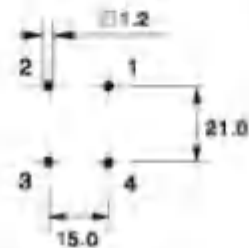
Part Number	Nominal Inductance (mH) Min.	Leakage Inductance (μH)Max.	D.C.R (Ω) Max.	Rated current I(A) Max.
ET2422H-683Y0R4	68	700	2.3	0.4
ET2422H-483Y0R8	48	600	1.65	0.5
ET2422H-333Y0R6	33	500	1.2	0.6
ET2422H-253Y0R8	25	400	0.88	0.8
ET2422H-203Y1H0	20	350	0.64	1.0
ET2422H-103Y1H2	10	250	0.36	1.2
ET2422H-452Y1R5	4.5	150	0.18	1.5
ET2422H-382Y1R8	3.8	150	0.15	1.8
ET2422H-332Y2R0	3.3	100	0.11	2.0
ET2422H-242Y2R5	2.4	85	0.09	2.5

## PHYSICAL CHARACTERISTICS:

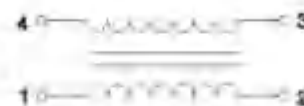
Dimensions 1



Hole pattern(in mm)



Winding



Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....2000V
- Operating temperature.....-25 ℃ to +125 ℃
- Housing.....UL94 V-0

# COMMON MODE POWER LINE CHOKE ET2430V SERIES



## FEATURES:

- Closed rectangular ferrite core
- 2 section winding for excellent high frequency performance
- 1% stray inductance for symmetrical interference suppression

## APPLICATIONS:

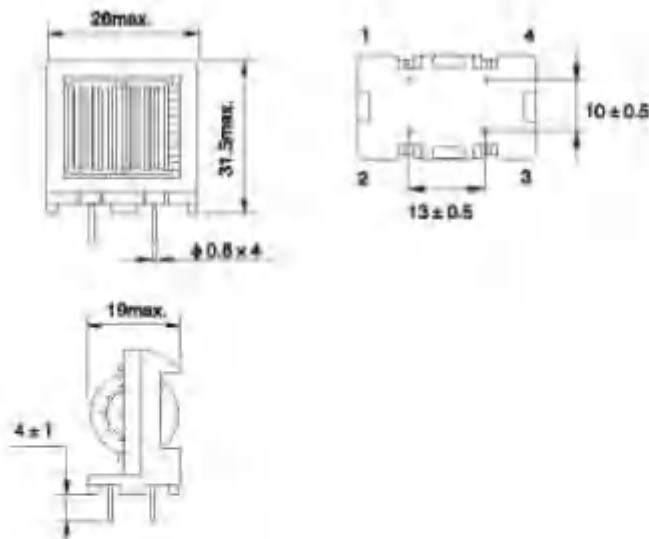
- Switch mode power supplies
- Suppression of common mode noise
- Compact switch mode power supplies
- Electronic ballast applications(LED bulb)
- Lighting

## ELECTRICAL CHARACTERISTICS:

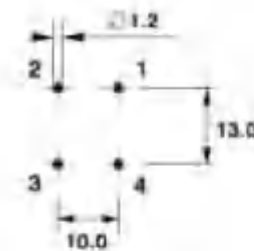
Part Number	Nominal inductance (mH) Min.	Leakage inductance (μH)Max.	D.C.R (Ω) Max.	Rated current (A) Max.
ET2430V-683Y0R4	68	700	2.3	0.4
ET2430V-453Y0R5	45	800	1.65	0.5
ET2430V-333Y0R6	33	500	1.2	0.6
ET2430V-253Y0R6	25	400	0.88	0.8
ET2430V-203Y1R0	20	350	0.64	1.0
ET2430V-103Y1R2	10	280	0.38	1.2
ET2430V-452Y1R5	4.5	150	0.19	1.5
ET2430V-392Y1R6	3.9	130	0.15	1.8
ET2430V-332Y2R0	3.3	100	0.11	2.0
ET2430V-242Y2R5	2.4	65	0.06	2.5

## PHYSICAL CHARACTERISTICS:

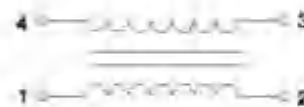
### Dimensions 1



### Hole pattern (in mm)



### Winding



### Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	2000V
Operating temperature.....	-25 °C to +125 °C
Housing.....	UL94 V-0

# COMMON MODE POWER LINE CHOKE ET2836H SERIES



## FEATURES:

- Closed rectangular ferrite core
- 2 section winding for excellent high frequency performance
- 1% stray inductance for symmetrical interference suppression

## APPLICATIONS:

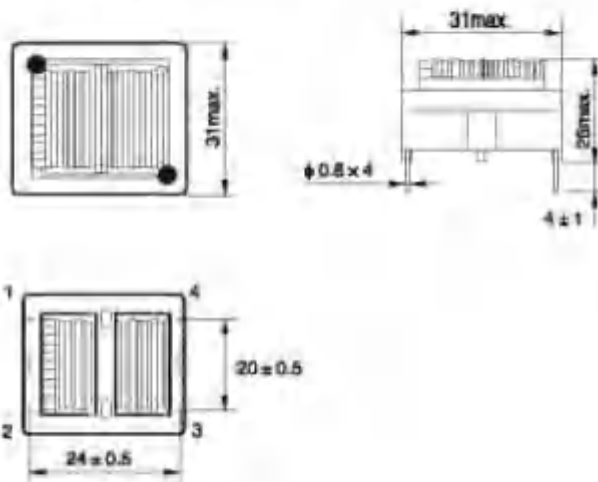
- Switch mode power supplies
- Suppression of common mode noise
- Compact switch mode power supplies
- Electronic ballast applications(LED bulb)
- Lighting

## ELECTRICAL CHARACTERISTICS:

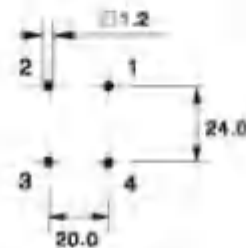
Part Number	Nominal Inductance (mH) Min.	Leakage Inductance (μH)Max.	D.C.R (Ω) Max.	Rated current I(A) Max.
ET2836H-353Y1R0	35	650	0.78	1.0
ET2836H-353Y1R2	35	800	0.58	1.2
ET2836H-203Y1R5	20	400	0.41	1.5
ET2836H-123Y1R8	12	300	0.27	1.8
ET2836H-832Y2R0	8	200	0.18	2.0
ET2836H-562Y2R5	5.6	200	0.13	2.5
ET2836H-472Y2R8	4.7	150	0.10	2.8
ET2836H-332Y3R0	3.3	100	0.088	3.0
ET2836H-182Y4R0	1.8	40	0.05	4.0

## PHYSICAL CHARACTERISTICS:

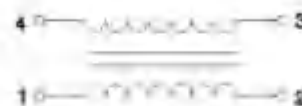
Dimensions 1



Hole pattern(in mm)



Winding



Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....2000V
- Operating temperature.....-25 ℃ to +125 ℃
- Housing.....UL94 V-0

# COMMON MODE POWER LINE CHOKE ET2836V SERIES



## FEATURES:

- Closed rectangular ferrite core
- 2 section winding for excellent high frequency performance
- 1% stray inductance for symmetrical interference suppression

## APPLICATIONS:

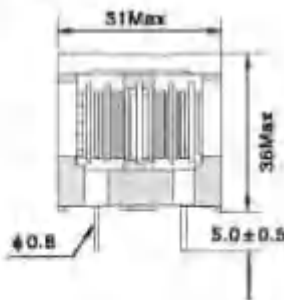
- Switch mode power supplies
- Suppression of common mode noise
- Compact switch mode power supplies
- Electronic ballast applications(LED bulb)
- Lighting

## ELECTRICAL CHARACTERISTICS:

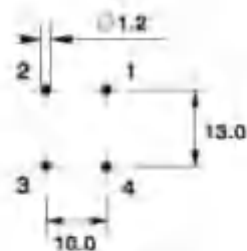
Part Number	Nominal Inductance (mH) Min.	Leakage Inductance ( $\mu$ H)Max.	D.C.R ( $\Omega$ ) Max.	Rated current (A) Max.
ET2836V-353Y1R0	35	650	0.78	1.0
ET2836V-253Y1R2	25	500	0.56	1.2
ET2836V-203Y1R5	20	400	0.41	1.5
ET2836V-123Y1R8	12	300	0.27	1.8
ET2836V-802Y2R0	8	200	0.18	2.0
ET2836V-502Y2R5	5.6	200	0.13	2.5
ET2836V-472Y2R8	4.7	150	0.10	2.8
ET2836V-332Y3R0	3.3	100	0.088	3.0
ET2836V-182Y4R0	1.8	40	0.05	4.0

## PHYSICAL CHARACTERISTICS:

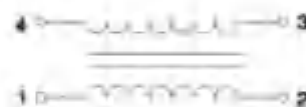
Dimensions 1



Hole pattern(in mm)



Winding



**Notes:**

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....2000V
- Operating temperature.....-25 °C to +125 °C
- Housing.....UL94 V-0



# COMMON MODE POWER LINE CHOKE ET3435V SERIES



## FEATURES:

- Approximate 1% stray inductance for symmetrical interference suppression
- Closed rectangular ferrite core
- Attenuation up to 75dB with high rated current

## APPLICATIONS:

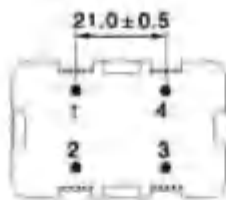
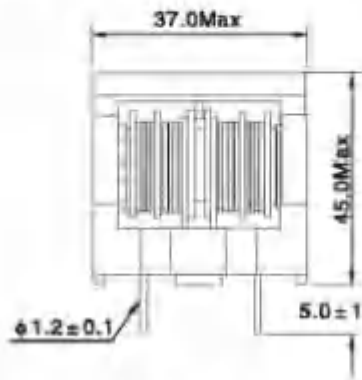
- Switch mode power supplies
- Suppression of common mode noise
- Mains filter
- Electronic ballast applications
- Lighting

## ELECTRICAL CHARACTERISTICS:

Part Number	L (mH) +50%/-30%	Rated Current (A)	RDC max. (Ω)
ET3435V-392Y	3.9	8.0	50
ET3435V-103Y	10	3.4	110
ET3435V-223Y	22	2.5	200
ET3435V-563Y	56	1.5	530
ET3435V-104Y	100	1.25	900

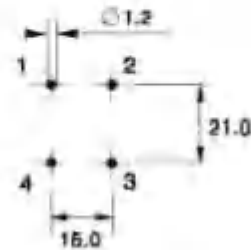
## PHYSICAL CHARACTERISTICS:

Dimensions 1



Bottom view

Hole pattern (in mm)



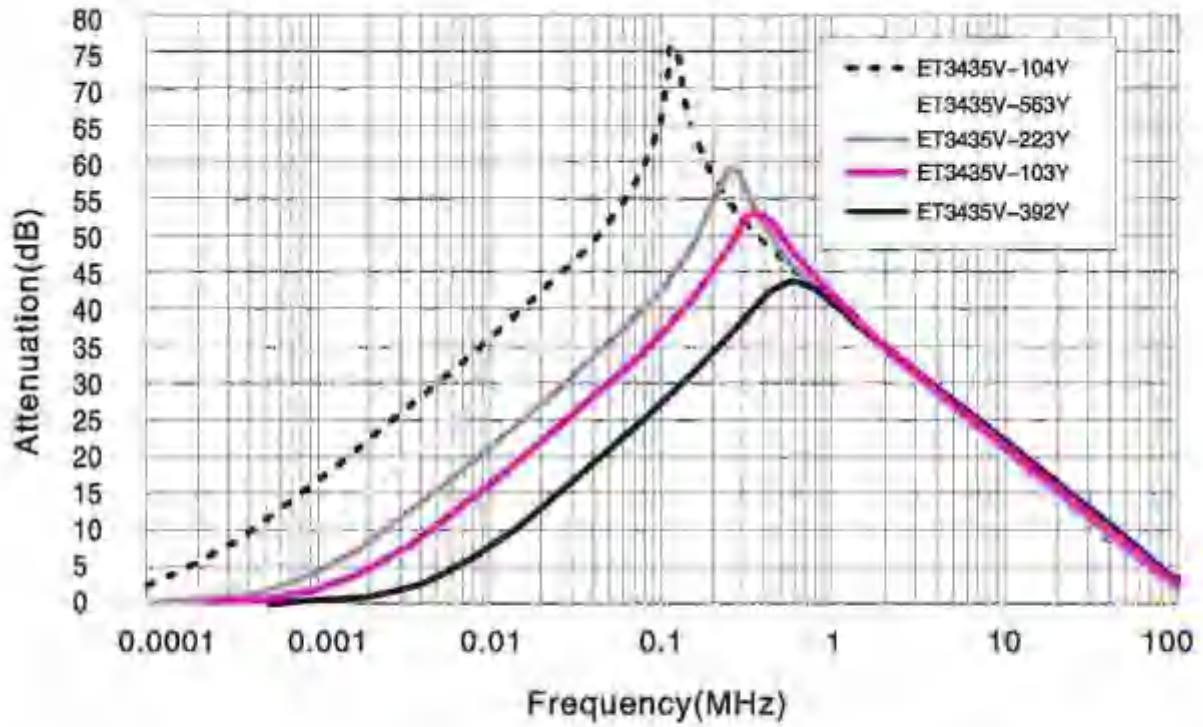
Winding



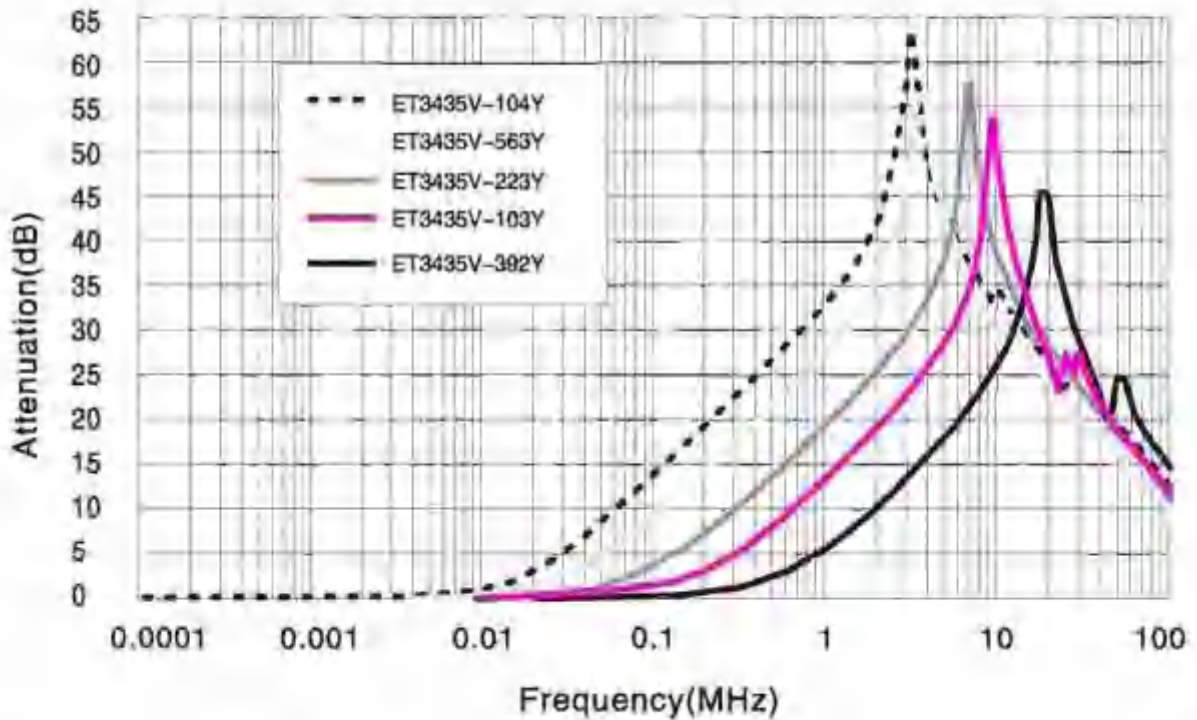
Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	2000V
Operating temperature.....	-40 °C to +125 °C
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE

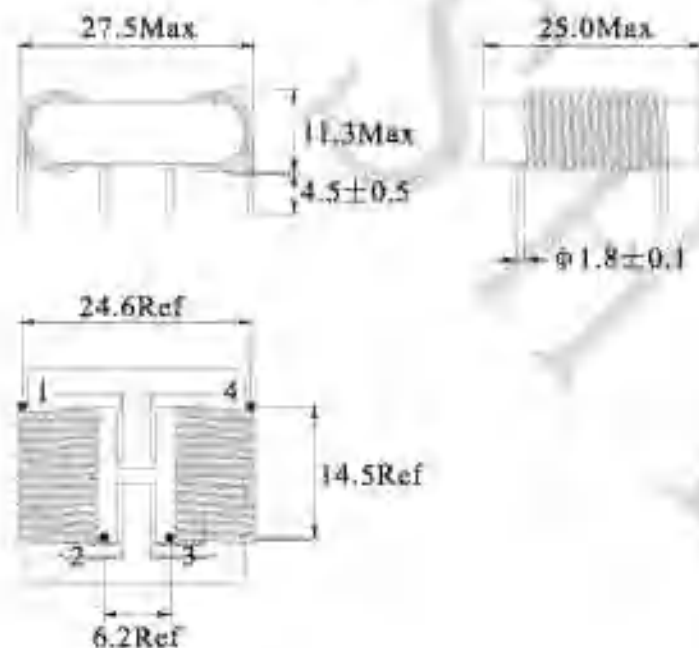


### ATTENUATION DIFFERENTIAL MODE



Rev.	Description	Date
A0	New release	2022.08.08

## 1. PHYSICAL CHARACTERISTICS( mm)



Bottom view

## 2. ELECTRONICAL SCHEMATIC



## 3. ELECTRONICAL SPECIFICATIONS

Inductance: 150uH $\pm$ 40%@10KHz,0.1V

LK: 5.6uH Max@10KHz,0.1V

RDC: 1.9m $\Omega$  Max

Rated current: 20A Max

Rated voltage: 250Vac

Hi-Pot: 1500Vac,5mA,2S N1 to N2

Operating temperature: -40 $^{\circ}$ C to +115 $^{\circ}$ C

Storage temperature: -40 $^{\circ}$ C to +60 $^{\circ}$ C

Test Instrument:

L: HP4284A

RDC: HM2540

Note:

1. Solderability: leads shall meet MIL-STD-202,

Method 208D for solderability.

2. Flammability: UL94V-0

3. ASTM oxygen index: >28%

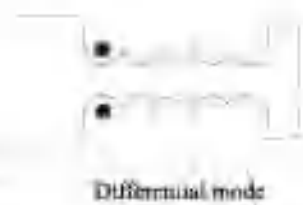
NAME:	Common mode inductor		
CUSTOMER P/N:	7448680180	DATE:	2022-08-08
SHINHOM P/N:	ETV2320H-151Y-20A	REV:	A0 PAGE
DRAWN BY	CHECKED BY	APPROVE BY	



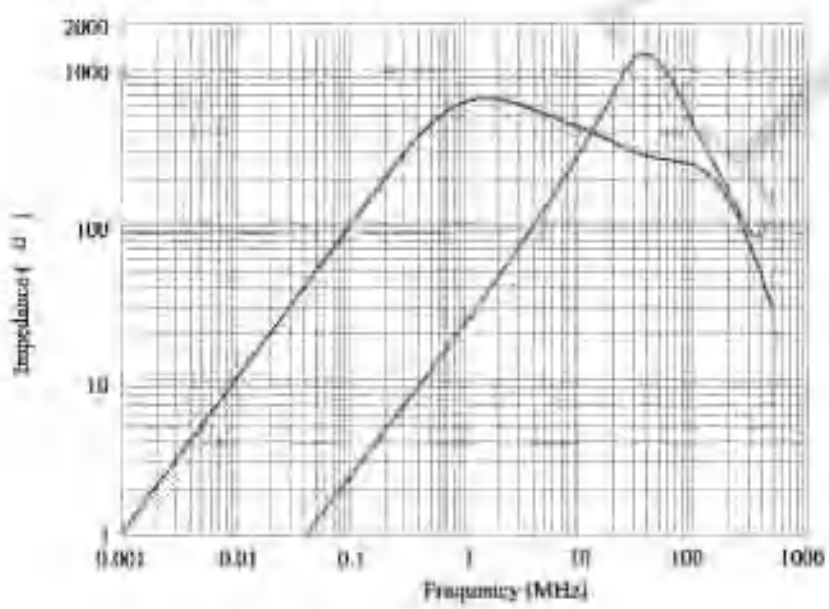
**SHINHOM**  
SHAANXI SHINHOM ENTERPRISE CO. LTD

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### Test Setup

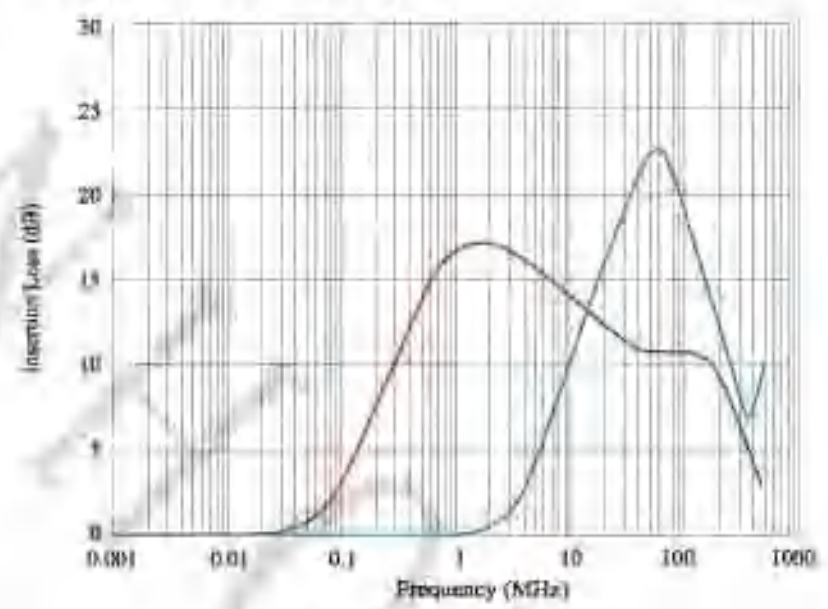


### Impedance VS Frequency



Common mode: — (red line)  
 Differential mode: — (black line)

### Insertion loss VS Frequency

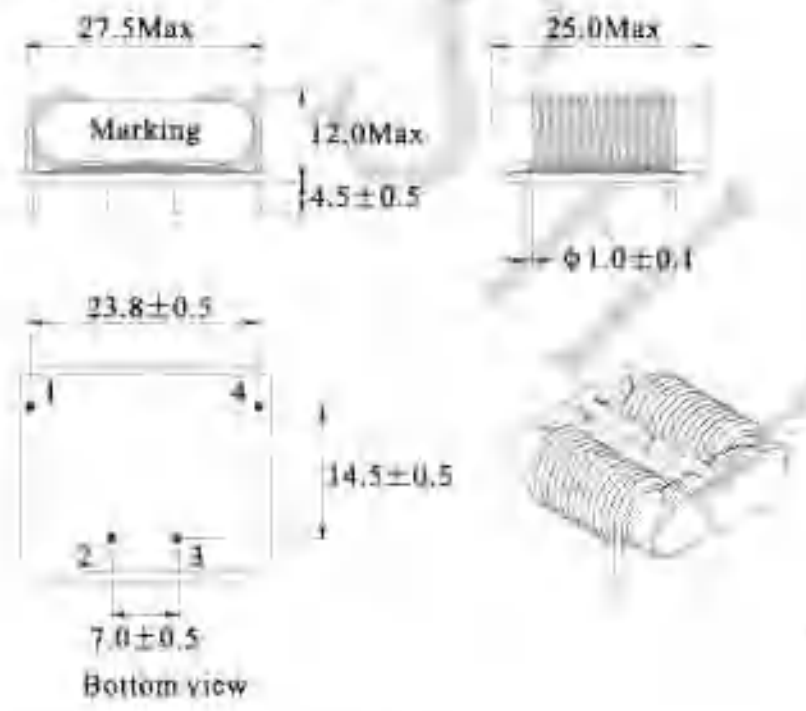


Common mode: — (red line)  
 Differential mode: — (black line)

NAME:	Common mode inductor		
CUSTOMER P/N:	7448680180	DATE:	2022-08-08
SHINHOM P/N:	ETV2320H-151Y-20A	REV:	A0
DRAWN BY:	CHECKED BY:	APPROVE BY:	

Rev.	Description	Date
A0	New release	2021.11.05

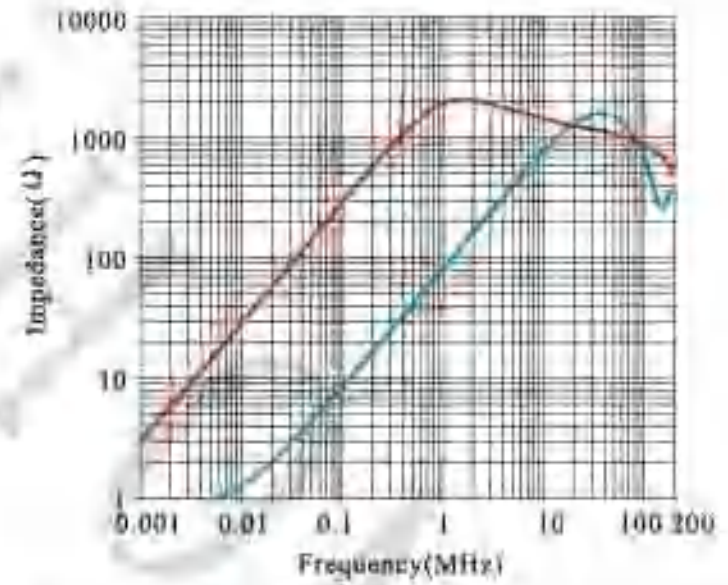
1. PHYSICAL CHARACTERISTICS( mm)



3. ELECTRICAL SPECIFICATIONS

- Inductance: 450nH ± 40% @ 10KHz, 0.1V
- LK: 200uH Max @ 10KHz, 0.1V
- RDC: 9.6mΩ Max
- Rated current: 10A Max
- Rated voltage: 250Vac
- Hi-Pot: 1500Vac, 5mA, 2S N1 to N2
- Operating temperature: -40°C to +115°C
- Storage temperature: -40°C to +60°C

2. ELECTRICAL SCHEMATIC



NAME:	Common mode inductor		
CUSTOMER P/N:	7448680100	DATE:	2021-11-05
SHINHOM P/N:	RTV2320H-451Y-10A	REV:	A0 PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

# COMMON MODE CHOKES

## LFU26 SERIES



### FEATURES:

- 1A to 3A ratings, low temperature rise
- 3.3mH to 30mH dual chokes
- Excellent Mechanical Strength
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

### APPLICATIONS:

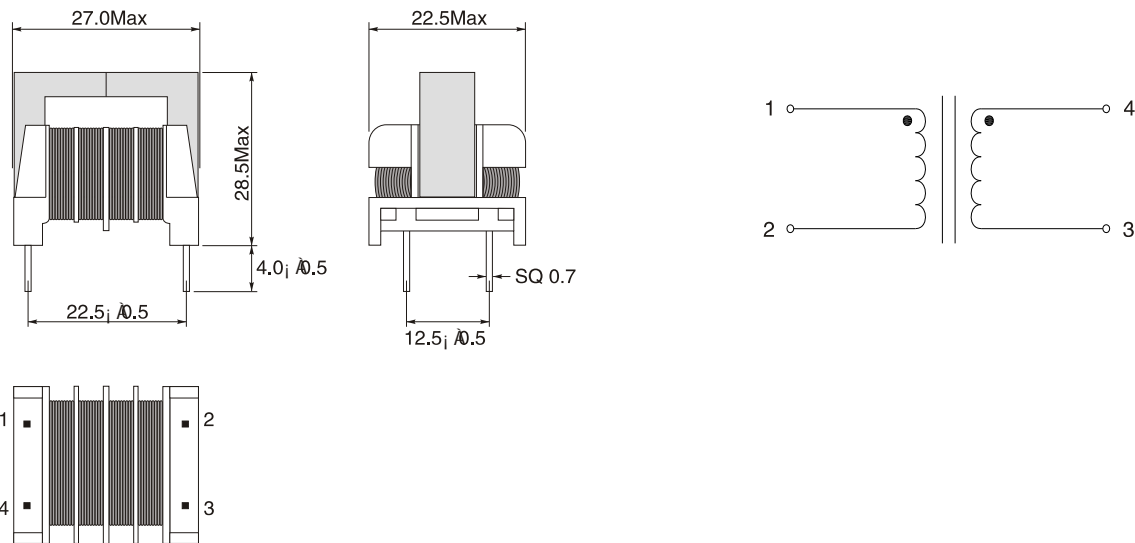
- EMC/EMI suppressors
- Suitable for all kinds of 100 ~ 500W power supply, electronic ballasts, LED power supply

## ELECTRICAL CHARACTERISTICS@25°C

Part Number	Inductance (mH) +50%/-30%	Test condition	Wire (mm)	IDC (A)Max
LFU26-332Y	3.3	10KHz,0.05V	φ 0.1*60P	3.0
LFU26-682Y	6.8	10KHz,0.05V	φ 0.65	2.8
LFU26-153Y	15	10KHz,0.05V	φ 0.65	2.1
LFU26-253Y	25	10KHz,0.05V	φ 0.5	1.2
LFU26-303Y	30	10KHz,0.05V	φ 0.4	1.0

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions(mm)



- Inductance Testing: 10KHz 0.05V HP4284A
- Test conditions of Electrical Properties: +25°C, 33% RH if not specified differently
- Rated Current: The current when temperature of coil increases up to Max. ΔT=40°C (Ta=25°C)
- It is recommended that the temperature of the component does not exceed +125°C under worst case conditions
- Operating temperature: -50°C to +110°C
- Storage Temperature: -20°C to +60°C
- Hi-Pot: 1000Vac/50Hz,3mA,1min. Winding to Winding
- Insulation Resistance: 100 MΩ Min when DC 500V between Winding to Winding
- Due to the limited space, the catalogue shows the typical specifications only. For more Specific details ( characteristics graph, reliability, and others)
- Acceptable customers design custom

## COMMON MODE CHOKES

### LFU28 SERIES



#### FEATURES:

- 0.3A to 0.8A ratings, low temperature rise
- 3.3mH to 30mH dual chokes
- Excellent Mechanical Strength
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

#### APPLICATIONS:

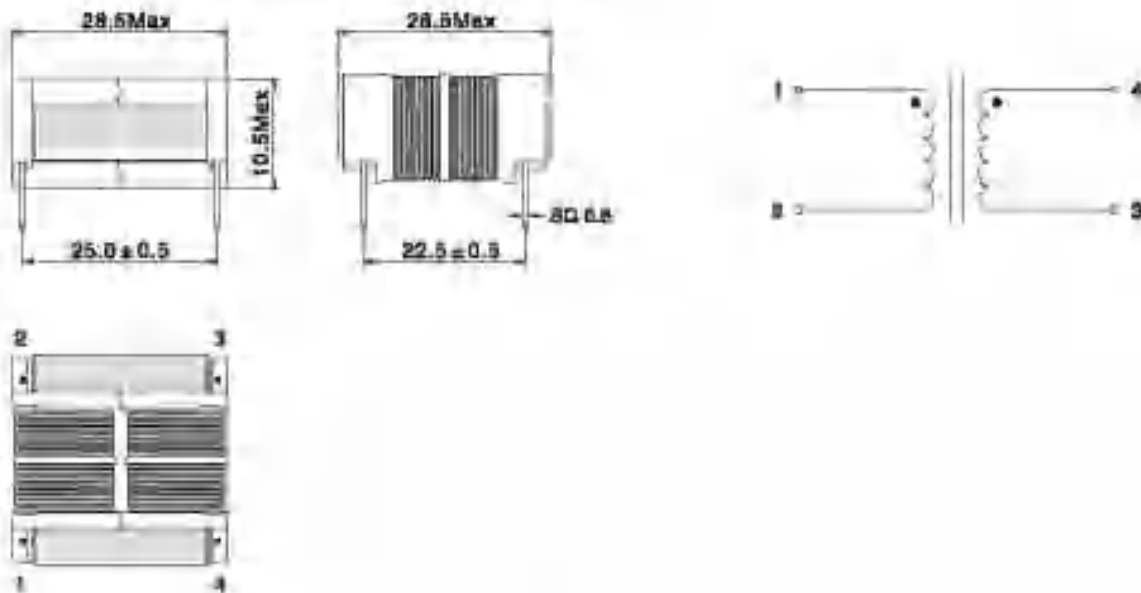
- EMC/EMI suppressors
- Suitable for all kinds of 100 - 250W power supply, electronic ballasts, LED power supply

### ELECTRICAL CHARACTERISTICS@25°C

Part Number	Inductance (mH) ±30%/±30%	Test condition	Wire (mm)	DC (A/MHz)
LFU28-332Y	3.3	100Hz, 0.05V	φ 0.4	0.8
LFU28-662Y	6.6	100Hz, 0.05V	φ 0.35	0.8
LFU28-152Y	15	100Hz, 0.05V	φ 0.32	0.5
LFU28-202Y	20	100Hz, 0.05V	φ 0.28	0.4
LFU28-302Y	30	100Hz, 0.05V	φ 0.25	0.3

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions(mm)

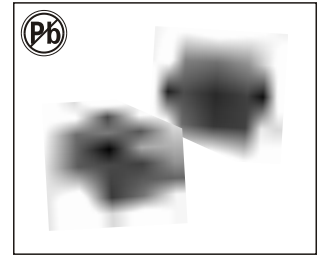


Inductance Testing: 100Hz 0.05V HP4284A

- Test conditions of Electrical Properties: +25°C, 30% RH if not specified differently
- Rated Current: This current when temperature of coil increases up to Max.  $\Delta T=40^{\circ}\text{C}$  ( $T_a=25^{\circ}\text{C}$ )
- If it is recommended that the temperature of the component does not exceed +100°C under worst case condition
- Operating Temperature:  $-50^{\circ}\text{C}$  to  $+110^{\circ}\text{C}$
- Storage Temperature:  $-20^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$
- HI-Pot: 1000V/60Hz-1.3mA, 1min. Winding to Winding
- Insulation Resistance: 100 MO Min when DC 500V between Winding in Winding
- Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristic graph, reliability, and others)
- Acceptable customer design solution

# COMMON MODE CHOKES

## LFUR17 SERIES



### FEATURES:

- High inductance with low resistance
- High pulse-handling capability
- Industry best inductance/rated current ratio
- Suitable for wave soldering

### APPLICATIONS:

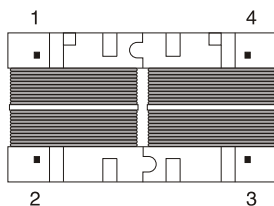
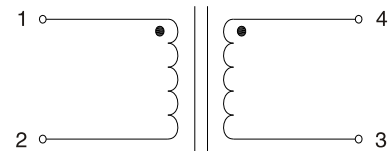
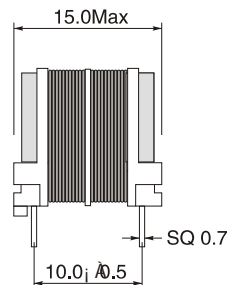
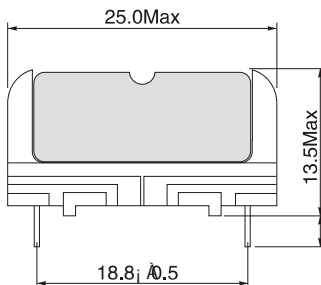
- Electronic ballasts for lamps
- High power switch-mode power supplies for consumer electronics

## ELECTRICAL CHARACTERISTICS@25°C

Part Number	Inductance (mH) +50%/-30%	Test condition	DCR (mΩ)Max	IDC (A)Max
LFUR17-332Y	3.3	1KHz,0.25V	120	2.5
LFUR17-103Y	10	1KHz,0.25V	312	1.65
LFUR17-153Y	15	1KHz,0.25V	520	1.32
LFUR17-273Y	27	1KHz,0.25V	1000	0.92
LFUR17-393Y	39	1KHz,0.25V	1450	0.85
LFUR17-473Y	47	1KHz,0.25V	1650	0.75
LFUR17-683Y	68	1KHz,0.25V	1950	0.62
LFUR17-783Y	78	1KHz,0.25V	2500	0.58
LFUR17-104Y	100	1KHz,0.25V	3500	0.45

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions(mm)



- Inductance Testing: 1.0KHz 0.25V HP4284A
- Test conditions of Electrical Properties: +25°C, 33% RH if not specified differently
- Temperature Rise 55°C Max
- It is recommended that the temperature of the component does not exceed +125°C under worst case conditions
- Operating temperature: -40°C to +85°C
- Storage Temperature: -20°C to +60°C
- Hi-Pot: 1500Vac/50Hz,3mA,2S Winding to Core  
2500Vac/50Hz,3mA,2S Winding to Winding
- Acceptable customers design custom

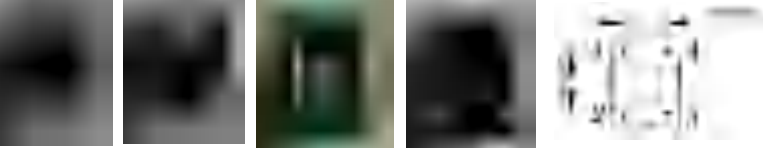
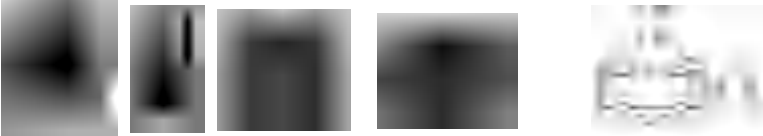
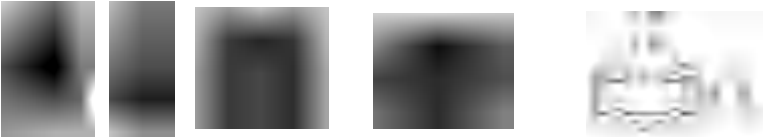
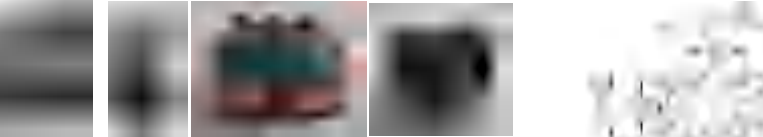
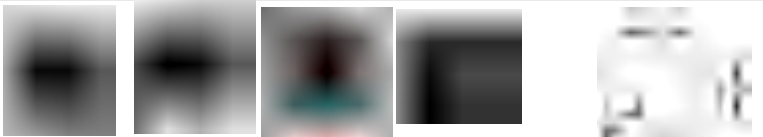

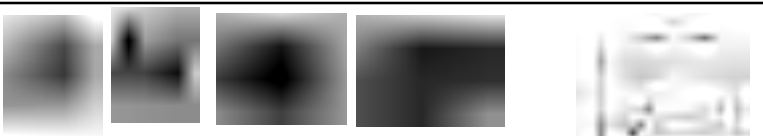
# Flat wire common mode choke coil product list

E-mail: [sales@shinhom.com.cn](mailto:sales@shinhom.com.cn)

Tel: 029-87851838

Fax: 029-87851840

Http: [www.shinhom.com](http://www.shinhom.com)

No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
1	FT10*8*5	0.5*7TS(内)	12 uH	20.0	3A	5*7 L: 11.0 W: 11.0 H: 10.0	
2	SQ1010	0.1*0.7*39TS	10mH	160.0	0.70	5.8*7 L: 14.5 W: 8.50 H: 13.5	
3	SQ1012	0.1*0.7*50	12mH	260.0	0.70	5.8*7 L: 14.5 W: 8.50 H: 15.5	
4	SQ1015	0.1*0.7*68	15.0mH	500.0	0.70	5.8*7 L: 14.5 W: 8.50 H: 18.0	
5	SQ1010	0.1*0.7*39TS	10mH	160.0	0.70	7*8 L: 11.0 W: 13.5 H: 9.5	
6	SQ1212	0.1*1.0*50TS	25mH	240.0	1.00	6*8 L:18.0 W:10.5 H:17.5	
7	SQ1212	0.1*1.0*50TS	25mH	240.0	1.00	7*8 L:18.0 W:11.5 H:17.5	

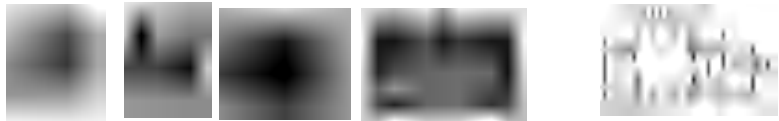
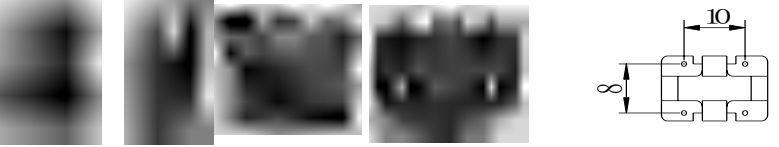



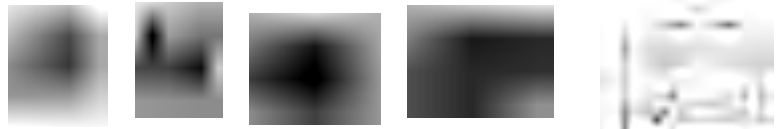
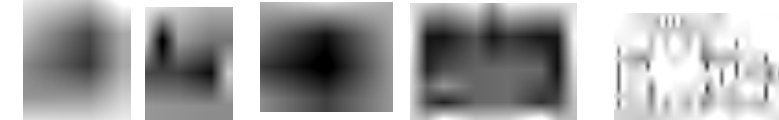
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Fax: 029-87851840

Http: [www.shinhom.com](http://www.shinhom.com)

No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
8	SQ1212	0.1*1.0*50TS	25mH	240.0	1.00	8*11 L:18.0 W:11.5 H:17.5	
9	SQ1218	0.1*1.0*87TS	50mH	360.0	1.00	8*10 L:18.0 W:11.5 H:21.5	
10	SQ1212	0.1*1.0*50TS	25mH	240.0	1.00	10*13 L:17.0 W:14.5 H:12.0	
11	SQ1212	0.13*1.0*45TS	15mH	170.0	1.30	6*8 L:18.0 W:10.5 H:17.5	
12	SQ1212	0.13*1.0*45TS	15mH	170.0	1.30	10*13 L:17.0 W:14.5 H:12.0	
13	SQ1212	0.13*1.0*45TS	15mH	170.0	1.30	7*8 L:18.0 W:11.5 H:17.5	
14	SQ1212	0.13*1.0*45TS	15mH	170.0	1.30	8*11 L:18.0 W:11.5 H:17.5	

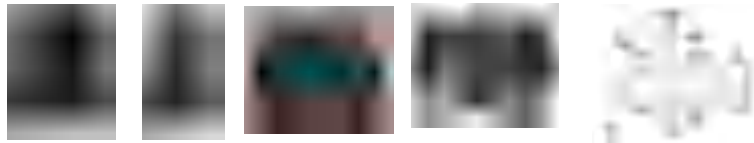
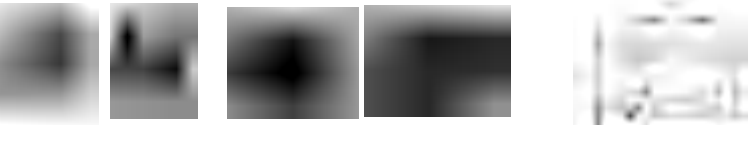

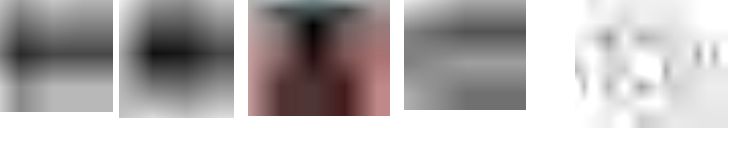



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Fax: 029-87851840

Http: [www.shinhom.com](http://www.shinhom.com)

No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
15	SQ1212	0.15*1.0*38TS	10mH	120.0	1.50	立式:6*8 L:18.0 W:10.5 H:17.5	
16	SQ1212	0.15*1.0*38TS	10mH	120.0	1.50	立式:7*8 L:18.0 W:11.5 H:17.5	
17	SQ1212	0.15*1.0*38TS	10mH	120.0	1.50	立式:8*11 L:18.0 W:11.5 H:17.5	
18	SQ1212	0.15*1.0*38TS	10mH	140.0	1.50	卧式:10*13 L:17.0 W:14.5 H:12.0	
19	SQ1212	0.15*1.0*38TS	10mH	140.0	1.50	卧式: 11.2*15.6 L:15.0 W:20.0 H:9.0	
20	SQ1212	0.2*1.0*35TS	8mH	100.0	2.00	立式:6*8 L:18.0 W:10.5 H:17.5	
21	SQ1212	0.2*1.0*35TS	8mH	100.0	2.00	立式:7*8 L:18.0 W:11.5 H:17.5	

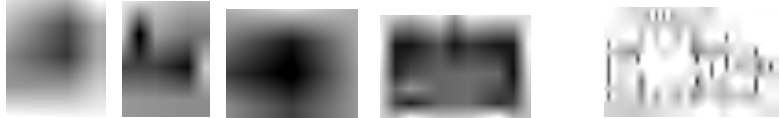


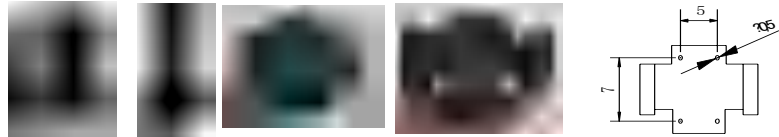
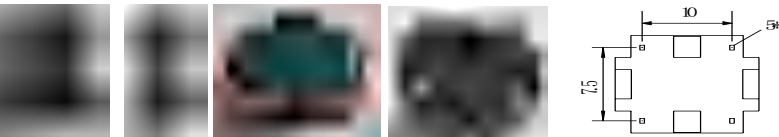
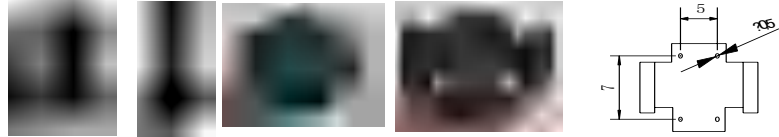
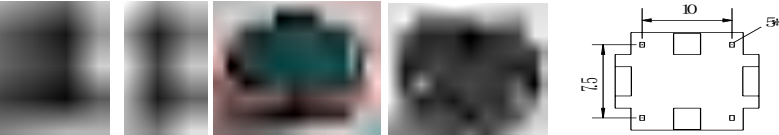
# Flat wire common mode choke coil product list

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Fax: 029-87851840

Http: www.shinhom.com

No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
22	SQ1212	0.2*1.0*35TS	8mH	100.0	2.00	8*11 L:18.0 W:11.5 H:17.5	
23	SQ1212	0.2*1.0*35TS	8.0mH	100.0	2.00	10*13 L:17.0 W:14.5 H:12.0	
24	SQ1314	0.1*1.0*50TS	15.0mH	210.0	1.00	7*8 L:18.0 W:11.0 H:18.5	
25	SQ1314	0.13*1.0*44TS	10.0mH	180.0	1.30	5*7 L:19.0 W:11.5 H:19.0	
26	SQ1314	0.13*1.0*44TS	10.0mH	180.0	1.30	7.5*10 L:19.0 W:11.5 H:19.0	
27	SQ1314	0.15*1.0*40TS	9.0mH	160.0	1.50	5*7 L:19.0 W:11.5 H:19.0	
28	SQ1314	0.15*1.0*40TS	9.0mH	160.0	1.50	7.5*10 L:19.0 W:11.5 H:19.0	

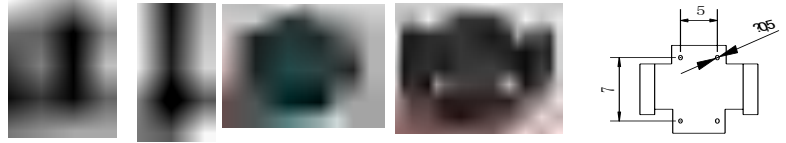



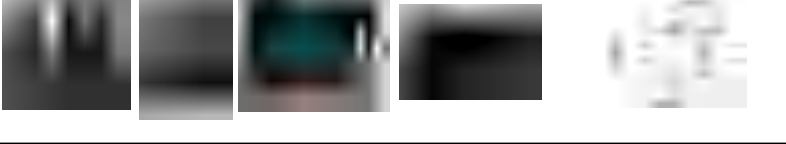


# Flat wire common mode choke coil product list

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Http: www.shinhom.com

No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
29	SQ1314	0.18*1.0*35TS	7.0mH	150.0	1.80	5*7 L:19.0 W:11.5 H:19.0	
30	SQ1314	0.18*1.0*35TS	7.0mH	150.0	1.80	7.5*10 L:19.0 W:11.5 H:19.0	
31	SQ1314	0.2*1.0*31TS	6.0mH	140.0	2.00	5*7 L:19.0 W:11.5 H:19.0	
32	SQ1314	0.2*1.0*31TS	6.0mH	140.0	2.00	7.5*10 L:19.0 W:11.5 H:19.0	
33	SQ1515	0.1*1.0*66TS	30.0mH	340.0	1.00	7.5*10 L:21.5 W:12.5 H:20.0	
34	SQ1515	0.1*1.0*66TS	30.0mH	340.0	1.00	8*10 L:21.5 W:12.5 H:21.0	
35	SQ1515	0.1*1.0*66TS	30.0mH	340.0	1.00	10*12.8 L:21.5 W:15.0 H:21.0	

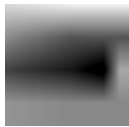
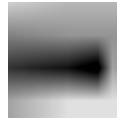



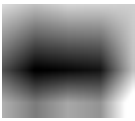
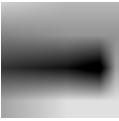
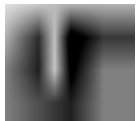
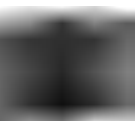

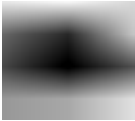

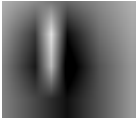
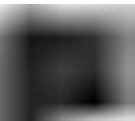






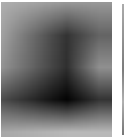




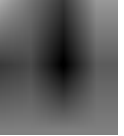


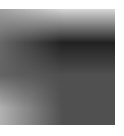

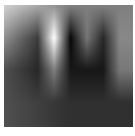

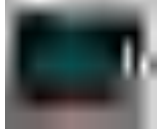


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Http: [www.shinhom.com](http://www.shinhom.com)

No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
36	SQ1515	0.1*1.0*66TS	30.0mH	340.0	1.00	13*17 L:22.0 W:17.5 H:15.0	    
37	SQ1515	0.1*1.0*66TS	30.0mH	340.0	1.00	9*13*17 L:22.0 W:17.5 H:15.0	    
38	SQ1515	0.1*1.0*66TS	30.0mH	340.0	1.00	13.5*13.5 L:21.0 W:17.0 H:13.0	    
39	SQ1518	0.1*1.0*85TS	50mH	500.0	1.00	17.0*21.0 L:21.0 W:25.0 H:9.5	    
40	SQ1515	0.13*1.0*56TS	25mH	220.0	1.30	6*8 L:21.0 W:11.5 H:21.0	    
41	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	6.5*10 L:21.5 W:12.5 H:21.0	    
42	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	7.5*10 L:21.5 W:12.5 H:20.0	    

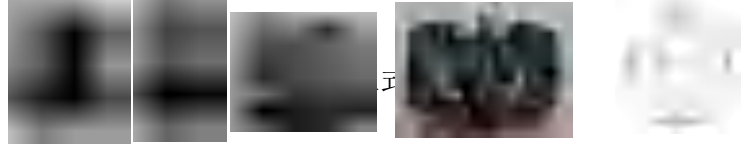
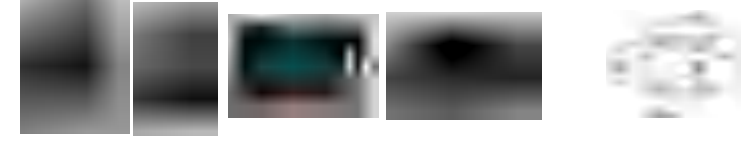
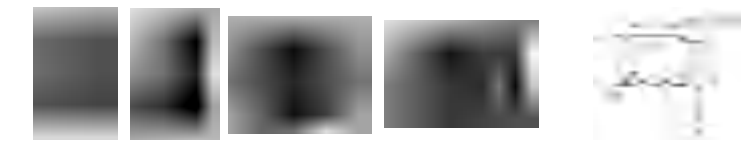
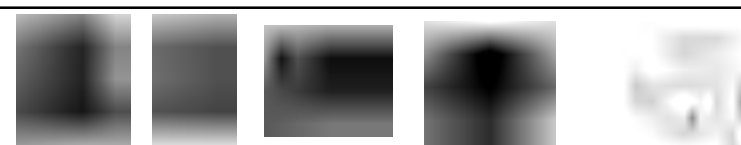
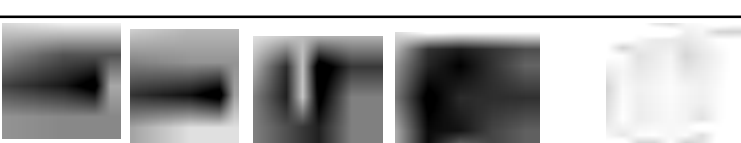
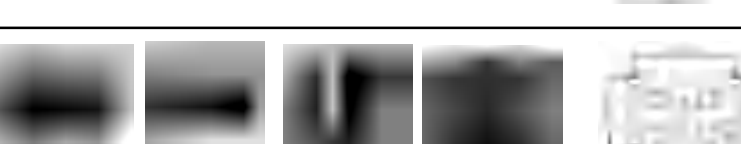

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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
43	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	8*9 L:21.5 W:12.5 H:19.5	
44	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	8*10 L:21.5 W:12.5 H:21.0	
45	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	9*10.5 L:21.5 W:13.0 H:20.0	
46	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	10*12.8 L:21.5 W:15.0 H:21.0	
47	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	13*17 L:22.0 W:17.5 H:15.0	
48	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	9*13*17 L:22.0 W:17.5 H:15.0	
49	SQ1515	0.13*1.0*56TS	25mH	250.0	1.30	13.5*13.5 L:21.0 W:17.0 H:13.0	

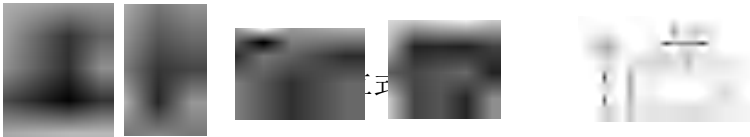
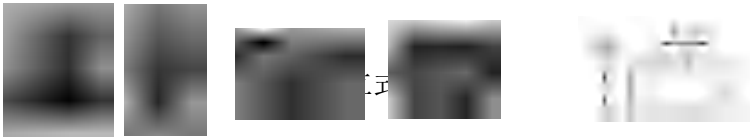
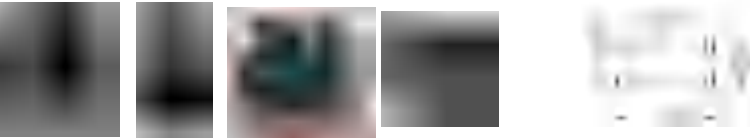



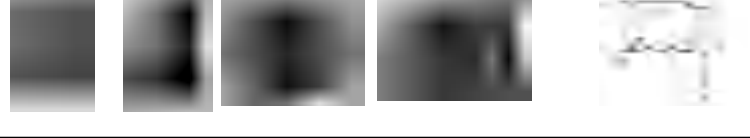

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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
50	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	6*8 L:21.0 W:11.5 H:21.0	
51	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	6.5*10 L:21.5 W:12.5 H:21.0	
52	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	7.5*10 L:21.5 W:12.5 H:20.0	
53	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	8*9 L:21.5 W:12.5 H:19.5	
54	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	8*10 L:21.5 W:12.5 H:21.0	
55	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	9*10.5 L:21.5 W:13.0 H:20.0	
56	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	10*12.8 L:21.5 W:15.0 H:21.0	


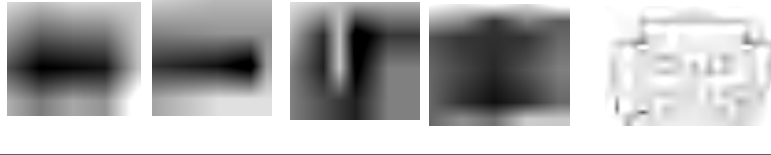
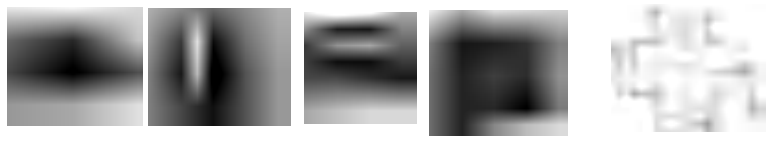
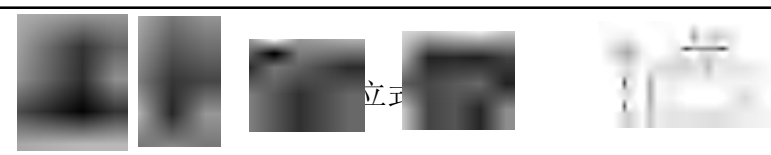

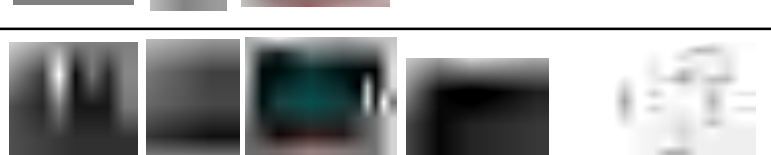

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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
57	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	13*17 L:22.0 W:17.5 H:15.0	
58	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	9*13*17 L:22.0 W:17.5 H:15.0	
59	SQ1515	0.15*1.0*50TS	20mH	200.0	1.50	13.5*13.5 L:21.0 W:17.0 H:13.0	
60	SQ1515	0.18*1.0*43TS	18.0mH	180.0	1.80	6*8 L:21.0 W:11.5 H:21.0	
61	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	6.5*10 L:21.5 W:12.5 H:21.0	
62	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	7.5*10 L:21.5 W:12.5 H:20.0	
63	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	8*9 L:21.5 W:12.5 H:19.5	

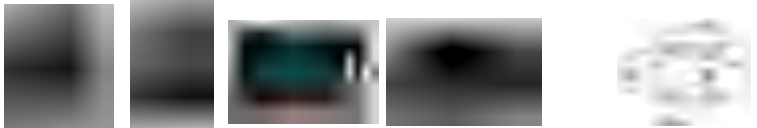
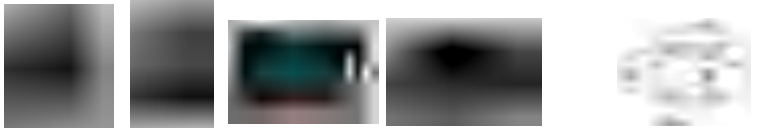
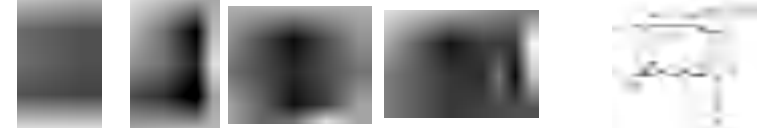
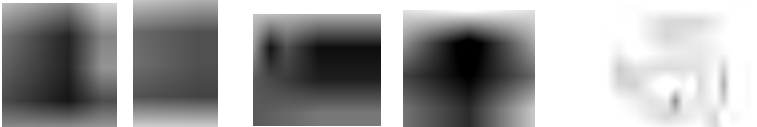
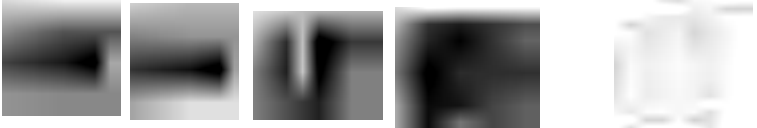
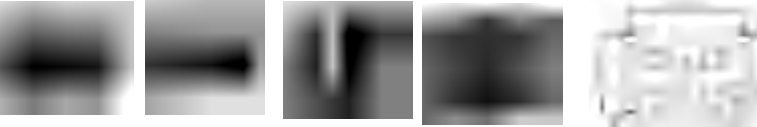
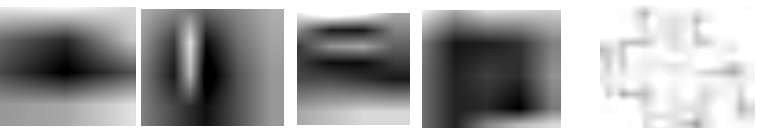
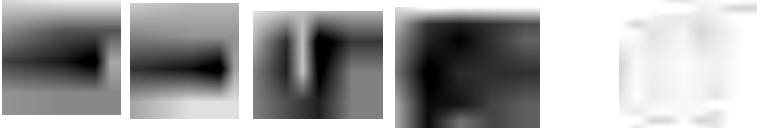
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
64	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	8*10 L:21.5 W:12.5 H:21.0	
65	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	9*10.5 L:21.5 W:13.0 H:20.0	
66	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	10*12.8 L:21.5 W:15.0 H:21.0	
67	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	13*17 L:22.0 W:17.5 H:15.0	
68	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	9*13*17 L:22.0 W:17.5 H:15.0	
69	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	13.5*13.5 L:21.0 W:17.0 H:13.0	
70	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	13*17 L:22.0 W:17.5 H:15.0	

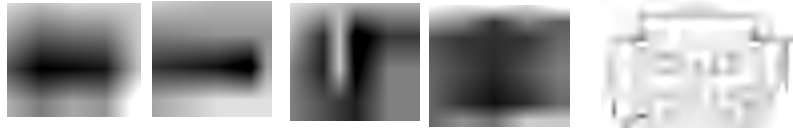
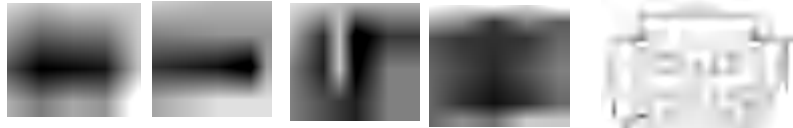
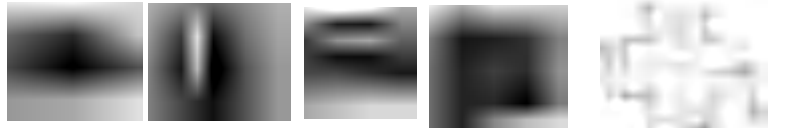
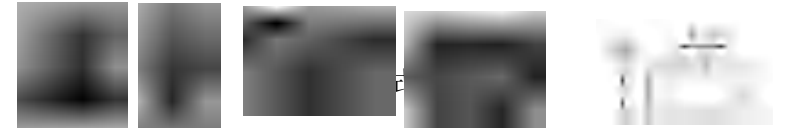
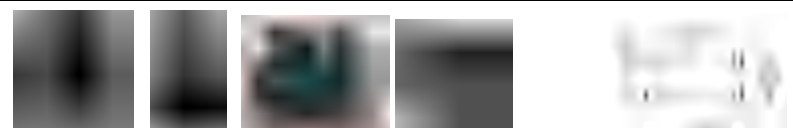


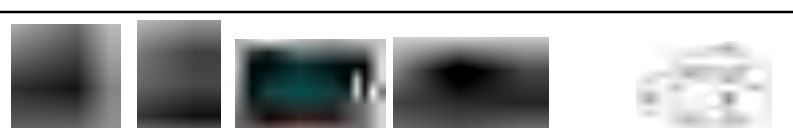
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
71	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	9*13*17 L:22.0 W:17.5 H:15.0	
72	SQ1515	0.18*1.0*42TS	18.0mH	180.0	1.80	13.5*13.5 L:21.0 W:17.0 H:13.0	
73	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	6*8 L:21.5 W:11.5 H:21.0	
74	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	6.5*10 L:21.5 W:12.5 H:21.0	
75	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	7.5*10 L:21.5 W:12.5 H:20.0	
76	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	8*9 L:21.5 W:12.5 H:19.5	
77	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	8*10 L:21.5 W:12.5 H:21.0	

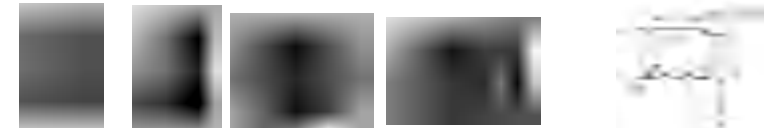
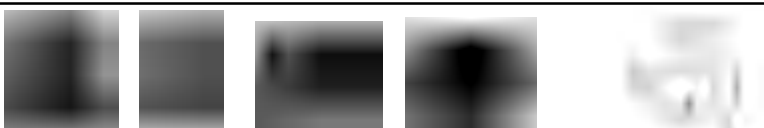

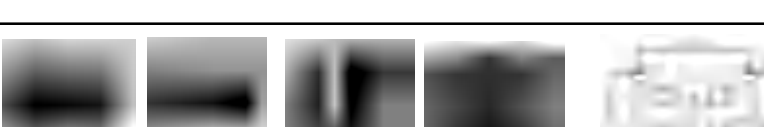




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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
78	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	9*10.5 L:21.5 W:13.0 H:20.0	
79	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	10*12.8 L:21.5 W:15.0 H:21.0	
80	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	13*17 L:22.0 W:17.5 H:15.0	
81	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	9*13*17 L:22.0 W:17.5 H:15.0	
82	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	13.5*13.5 L:21.0 W:17.0 H:13.0	
83	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	13*17 L:22.0 W:17.5 H:15.0	
84	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	9*13*17 L:17.0 W:14.5 H:12.0	

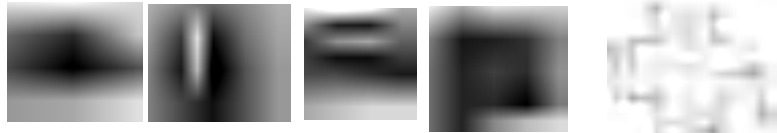
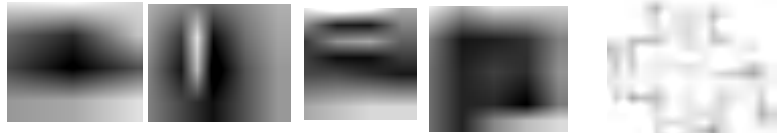
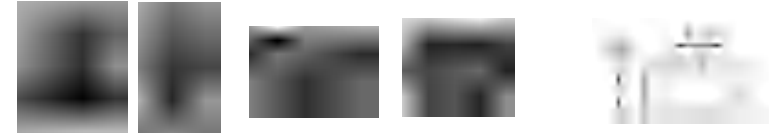
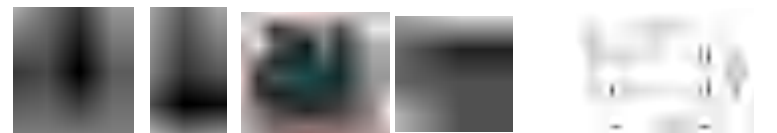
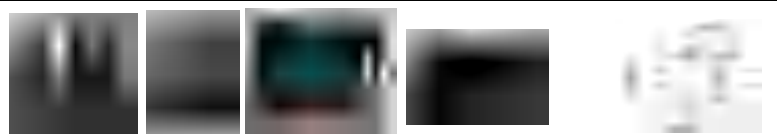

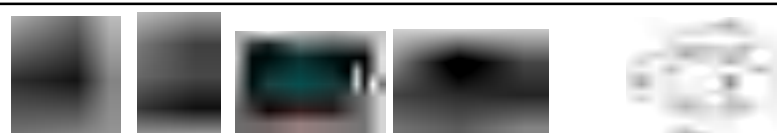

# Flat wire common mode choke coil product list

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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
85	SQ1515	0.2*1.0*40TS	12mH	130.0	2.00	13.5*13.5 L:21.0 W:17.0 H:13.0	
86	SQ1515	0.18*1.2*42TS	18.0mH	120.0	2.10	6*8 L:21.5 W:11.5 H:21.0	
87	SQ1515	0.18*1.2*42TS	18.0mH	120.0	2.10	6.5*10 L:21.5 W:12.5 H:21.0	
88	SQ1515	0.18*1.2*42TS	18.0mH	120.0	2.10	7.5*10 L:21.5 W:12.5 H:20.0	
89	SQ1515	0.18*1.2*42TS	18.0mH	120.0	2.10	8*9 L:21.5 W:12.5 H:19.5	
90	SQ1515	0.15*1.5*48TS	15.0mH	100.0	2.20	8*10 L:21.5 W:12.5 H:21.0	
91	SQ1515	0.15*1.5*48TS	15.0mH	100.0	2.20	13*17 L:22.5 W:17.5 H:15.5	

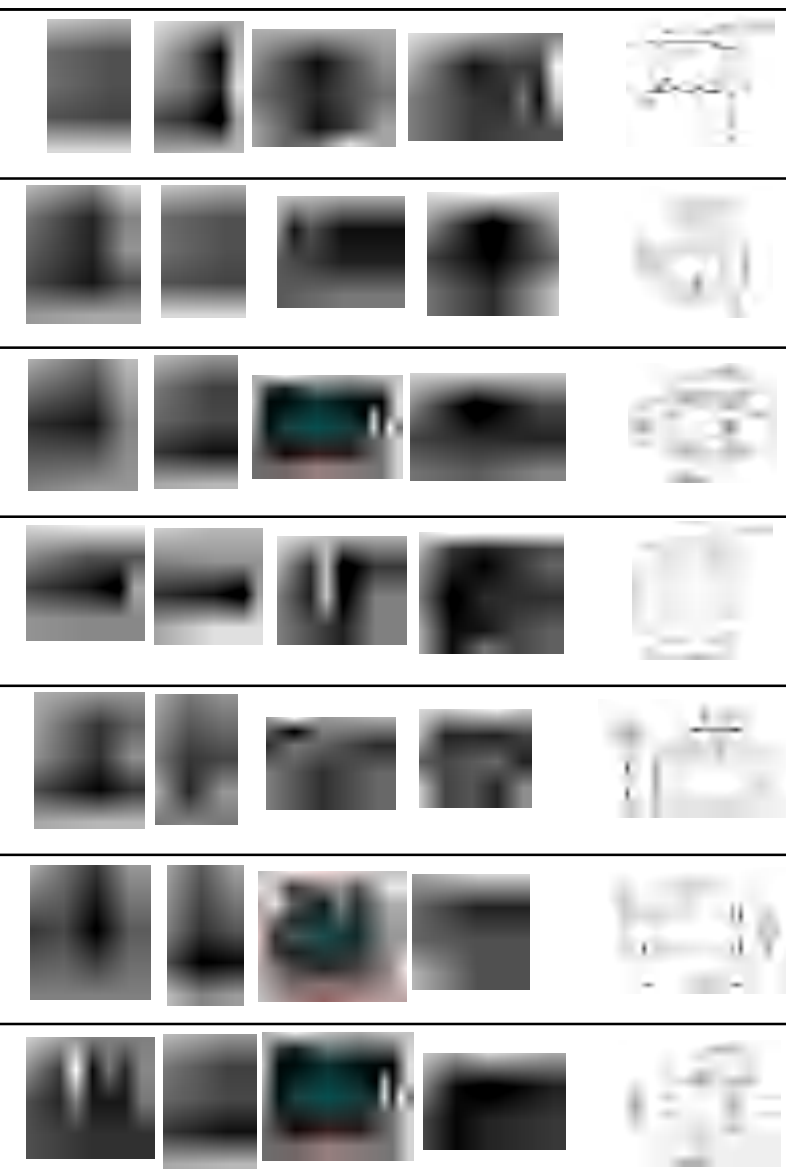
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
92	SQ1515	0.18*1.2*42TS	18.0mH	120.0	2.10	9*10.5 L:21.5 W:13.0 H:20.0	
93	SQ1515	0.18*1.2*42TS	18.0mH	120.0	2.10	10*12.8 L:21.5 W:15.0 H:21.0	
94	SQ1515	0.2*1.5*38TS	10.0mH	80.0	3.00	8*10 L:21.5 W:15.0 H:21.0	
95	SQ1515	0.2*1.5*38TS	10.0mH	80.0	3.00	13*17 L:22.5 W:17.5 H:15.5	
96	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	6*8 L:21.0 W:11.5 H:21.0	
97	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	6.5*10 L:21.5 W:12.5 H:21.0	
98	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	7.5*10 L:21.5 W:12.5 H:20.0	

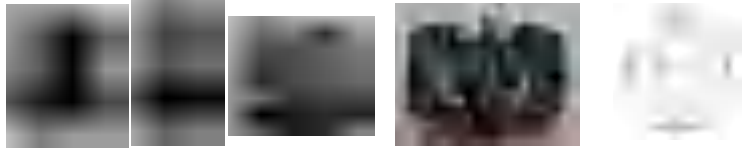
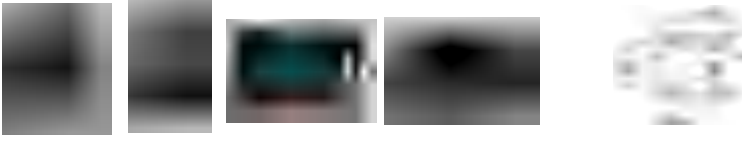
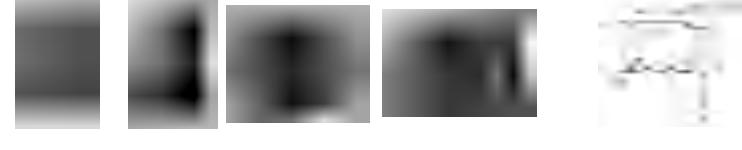
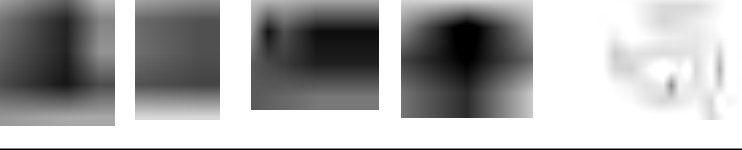


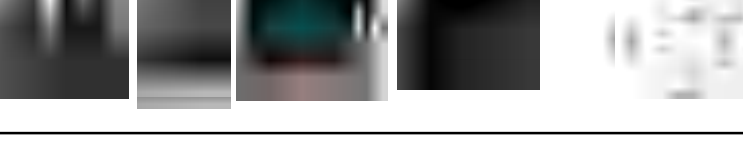
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
99	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	8*9 L:21.5 W:12.5 H:19.5	
100	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	8*10 L:21.5 W:12.5 H:21.0	
101	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	9*10.5 L:21.5 W:13.0 H:20.0	
102	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	10*12.8 L:21.5 W:15.0 H:21.0	
103	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	13*17 L:22.0 W:17.5 H:15.0	
104	SQ1515	0.3*1.0*28TS	10.0mH	80.0	3.00	13.5*13.5 L:21.0 W:17.0 H:13.0	
105	SQ1515	0.25*1.5*32TS	10.0mH	60.0	3.60	7.5*10 L:21.5 W:12.5 H:20.0	

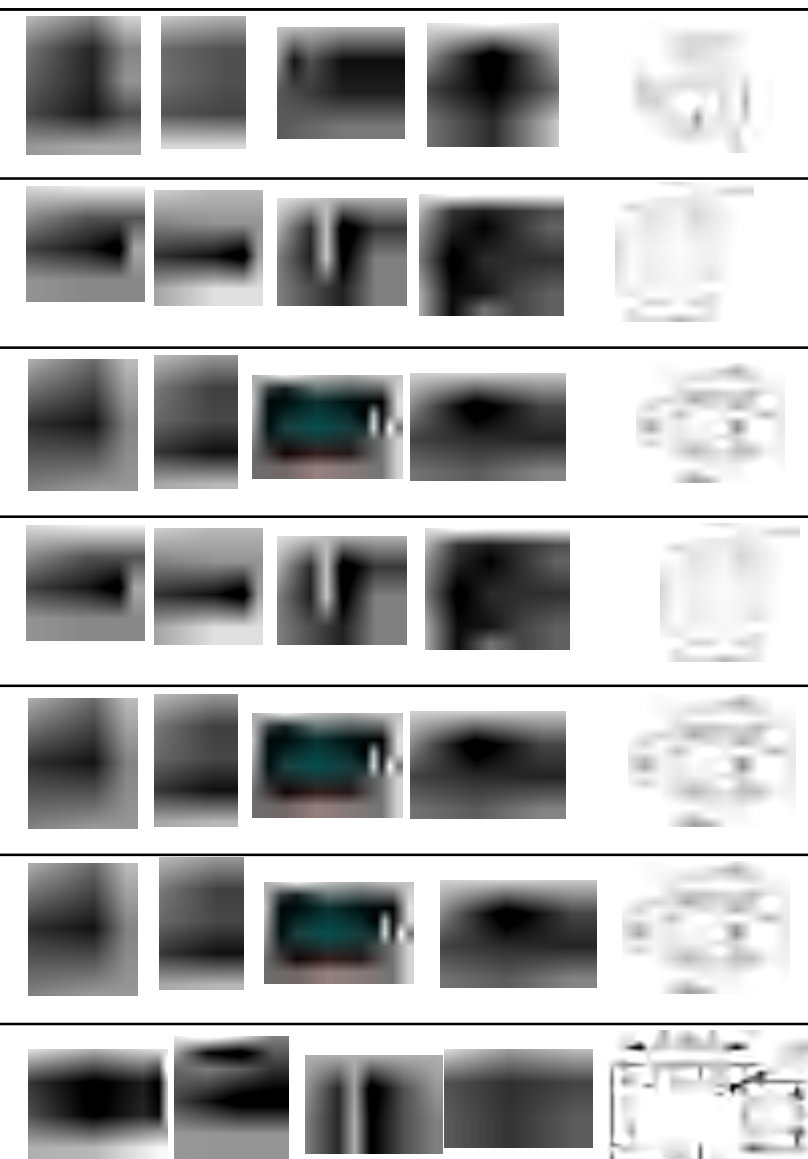
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
106	SQ1515	0.25*1.5*32TS	10.0mH	60.0	3.60	10*12.8 L:21.5 W:15.0 H:21.0	
107	SQ1515	0.25*1.5*32TS	10.0mH	60.0	3.60	13*17 L:22.0 W:17.5 H:15.0	
108	SQ1515	0.3*1.5*28TS	6.0mH	50.0	4.50	8*10 L:21.5 W:12.5 H:21.0	
109	SQ1515	0.3*1.5*28TS	6.0mH	50.0	4.50	13*17 L:22.5 W:17.5 H:15.5	
110	SQ1515	0.35*1.5*25TS	4.0mH	45.0	5.20	8*10 L:21.5 W:12.5 H:21.0	
111	SQ1515	0.4*1.5*22	4.0mH	30.0	6.00	8*10 L:21.5 W:12.5 H:21.0	
112	SQ1914	0.08*1.0*75TS	25.0mH	500.0	0.80	10*19 L:24.5 W:16.0 H:14.5	

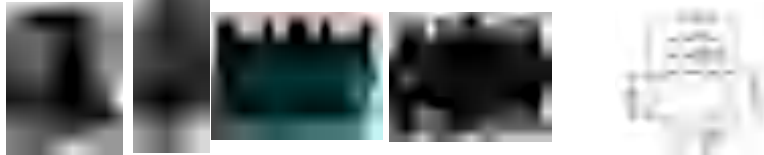
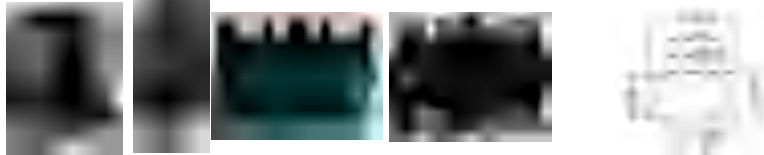
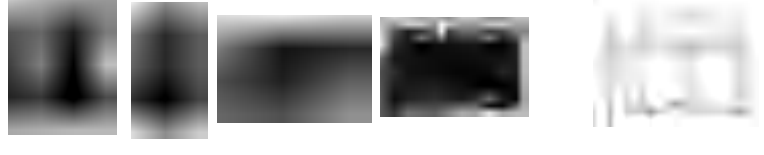
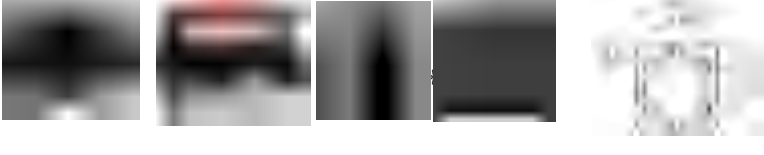
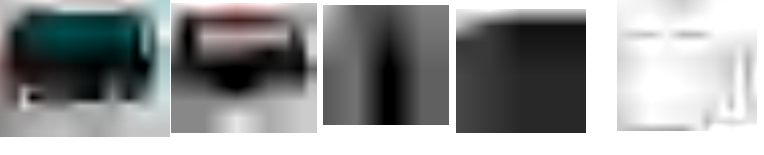
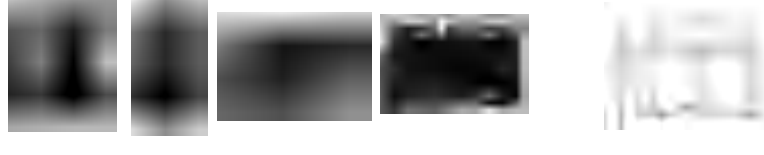
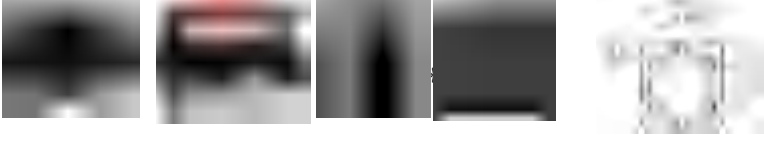
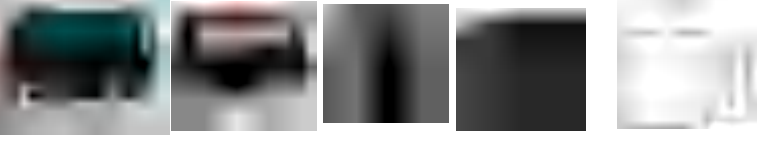
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
113	SQ1918	1.0*13TS	700uH	20.0	0.80	10*13 L:23.5 W:13.5 H:26.0	
114	SQ1918	0.13*1.0*66TS	25.0mH	280.0	1.30	10*13 L:24.0 W:14.5 H:25.5	
115	SQ1918	0.13*1.0*66TS	25.0mH	280.0	1.30	10*13 L:23.5 W:22.5 H:15.0	
116	SQ1918	0.13*1.0*66TS	25.0mH	280.0	1.30	15.5*17 L:23.5 W:22.0 H:14.5	
117	SQ1918	0.15*1.0*58TS	20.0mH	230.0	1.50	10*13 L:24.0 W:14.5 H:25.5	
118	SQ1918	0.15*1.0*58TS	20.0mH	230.0	1.50	10*13 L:23.5 W:22.5 H:15.0	
119	SQ1918	0.15*1.0*58TS	20.0mH	230.0	1.50	15.5*17 L:23.5 W:22.0 H:14.5	

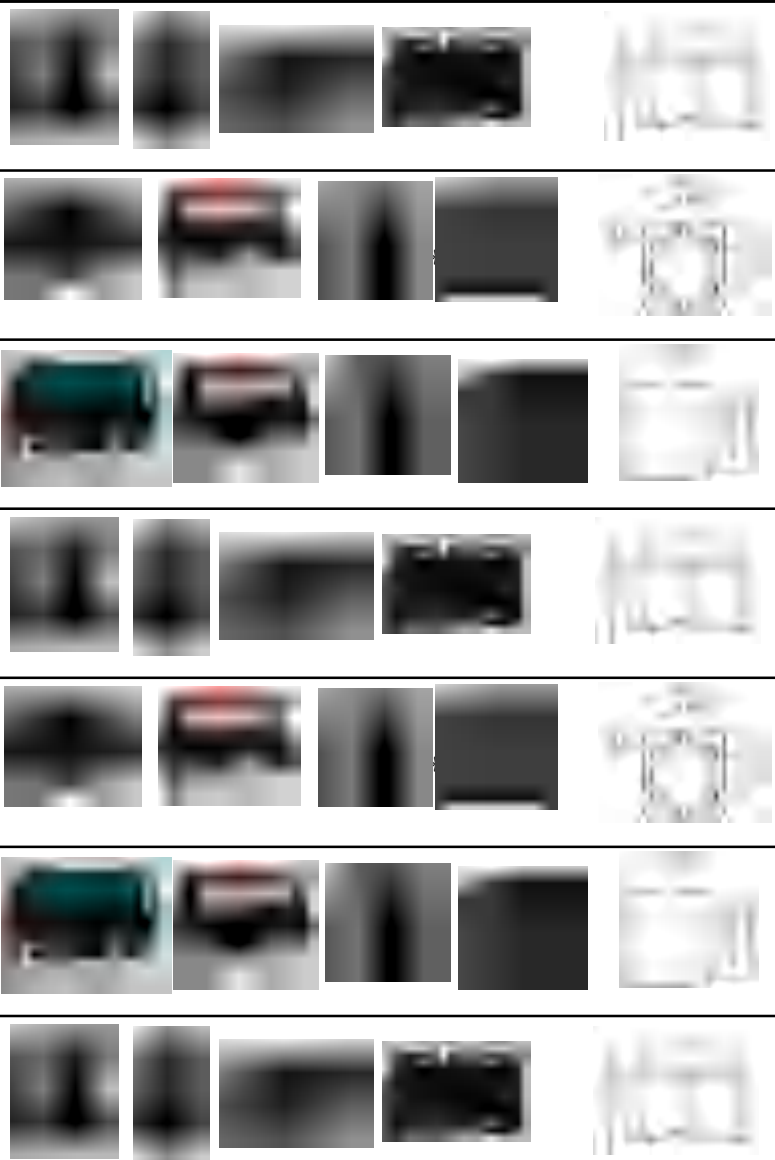
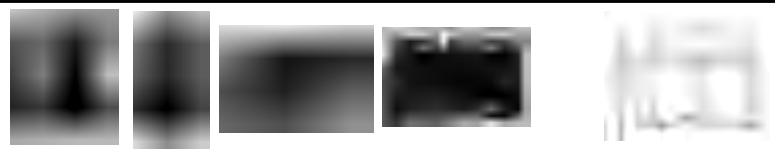
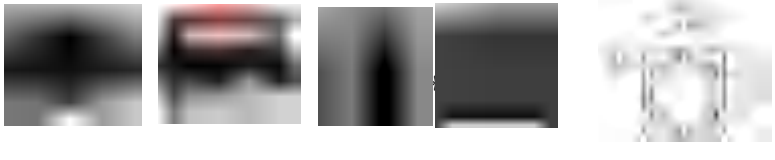
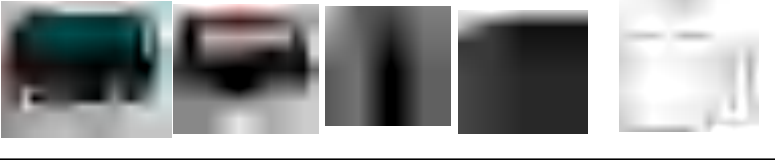
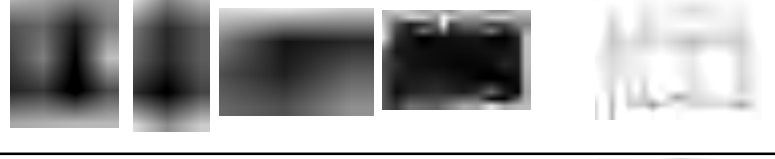



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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
120	SQ1918	0.18*1.0*55TS	18.0mH	180.0	1.80	10*13 L:24.0 W:14.5 H:25.5	
121	SQ1918	0.18*1.0*55TS	18.0mH	200.0	1.80	10*13 L:23.5 W:22.5 H:15.0	
122	SQ1918	0.18*1.0*55TS	18.0mH	200.0	1.80	15.5*17 L:23.5 W:22.0 H:14.5	
123	SQ1918	0.2*1.0*50TS	15.0mH	150.0	2.00	10*13 L:24.0 W:14.5 H:25.5	
124	SQ1918	0.2*1.0*50TS	15.0mH	150.0	2.00	10*13 L:23.5 W:22.5 H:15.0	
125	SQ1918	0.2*1.0*50TS	15.0mH	150.0	2.00	15.5*17 L:23.5 W:22.0 H:14.5	
126	SQ1918	0.25*1.0*40TS	10.0mH	130.0	2.50	10*13 L:24.0 W:14.5 H:25.5	

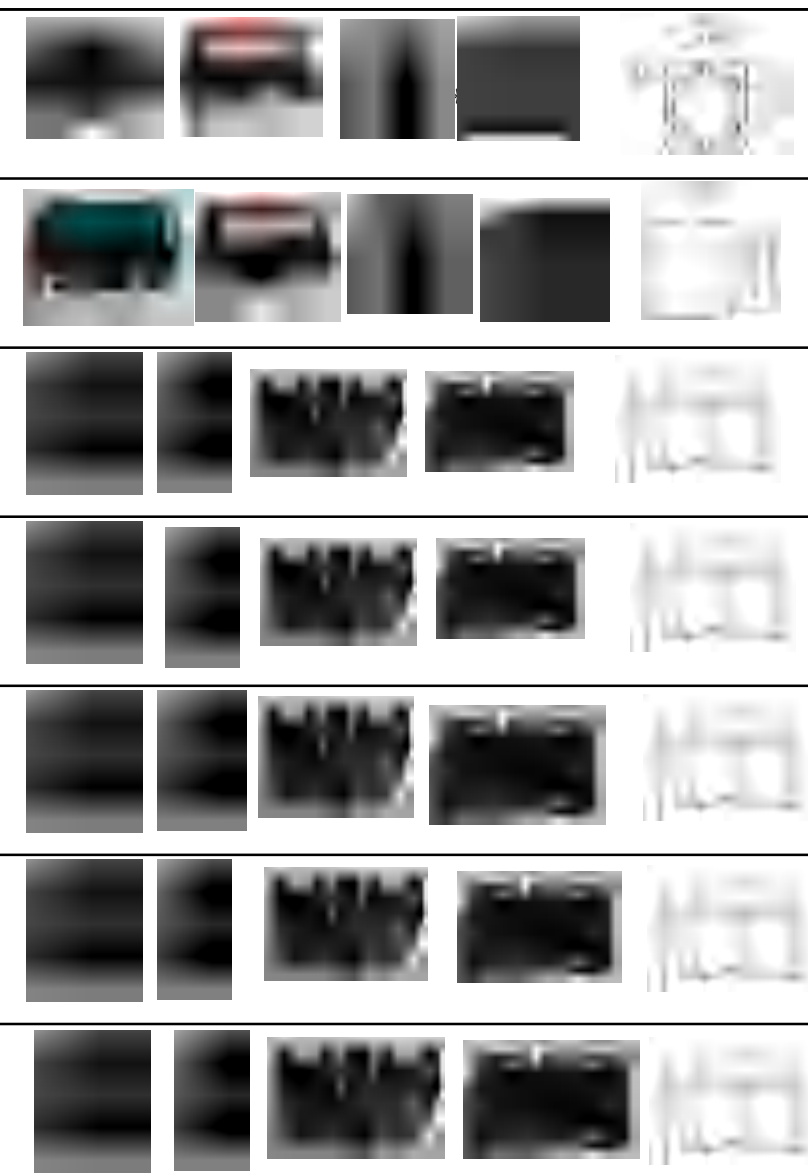
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
127	SQ1918	0.25*1.0*40TS	10.0mH	130.0	3.00	10*13 L:23.5 W:22.5 H:15.0	
128	SQ1918	0.25*1.0*40TS	10.0mH	130.0	3.00	15.5*17 L:23.5 W:22.0 H:14.5	
129	SQ1918	0.25*1.2*40TS	10.0mH	130.0	3.00	10*13 L:24.0 W:14.5 H:25.5	
130	SQ1918	0.3*1.5*34TS	10.0mH	100.0	4.50	10*13 L:24.0 W:14.5 H:25.5	
131	SQ1918	0.35*1.5*31TS	7.0mH	80.0	5.20	10*13 L:24.0 W:14.5 H:25.5	
132	SQ1918	0.4*1.5*34TS	5.0mH	60.0	6.00	10*13 L:24.0 W:14.5 H:25.5	
133	SQ1918	0.5*1.5*23TS	2.0mH	25.0	7.50	10*13 L:24.0 W:14.5 H:25.5	

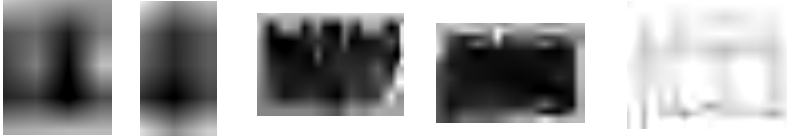



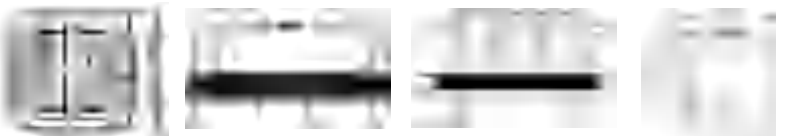
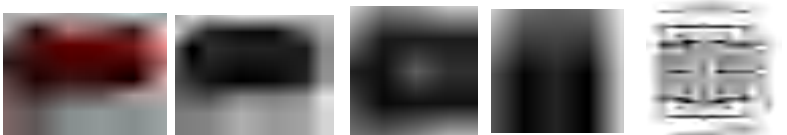

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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
134	SQ2018	0.15*1.5*60TS	20.0mH	150.0	2.25	10*13 L:25.0 W:14.5 H:26.0	
135	SQ2318	0.2*1.0*50TS	10.0mH	160.0	2.00	17.5*34.5 L:35.5 W:26.0 H:12.5	
136	SQ2318	0.2*1.5*58TS	15.0mH	120.0	3.00	20*22.5 L:26.5 W:25.0 H:12.5	
137	ETV2320	1.1Φ*9TS	450 uH+/-40%	9.6	11.00	7*14.5*23.8 L:27.5 W:25.0 H:12.5	
138	ETV2320	1.1Φ*12TS	200 uH	15.0	11.00	7*14.5*23.8 L:27.5 W:25.0 H:12.5	
139	ETV2320	1.1Φ*12TS	200 uH	15.0	11.00	7*14.5*23.8 L:27.5 W:25.0 H:11.0	
140	ETV2320	0.3*1.5*44TS	5.0mH	60.0	4.50	9.5*12 L:27.0 W:14.5 H:30.0	

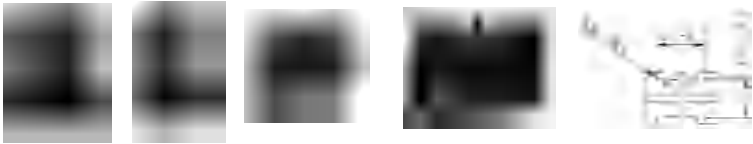

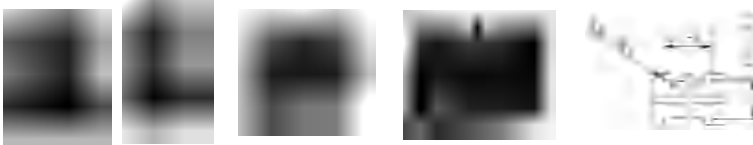
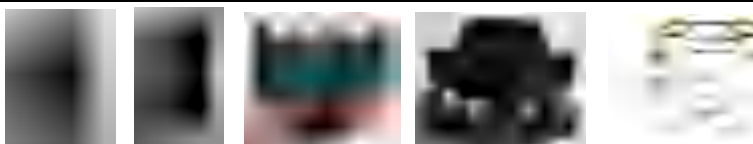
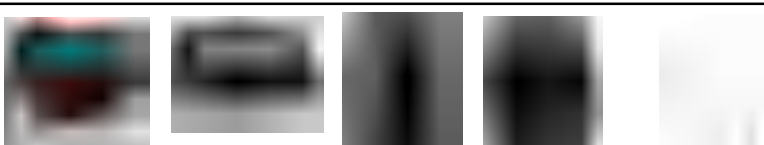


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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
141	SQ2418	0.25*1.0*61TS	25.0mH	160.0	2.50	10*13 L:23.0 W:15.0 H:31.0	
142	SQ2418	0.25*1.0*61TS	25.0mH	160.0	2.50	17*21.5 L:23.0 W:26.0 H:15.0	
143	SQ2418	0.2*1.5*70TS	20.0mH	145.0	3.00	10*13 L:24.0 W:15.0 H:31.0	
144	SQ2418	0.2*1.5*70TS	20.0mH	145.0	3.00	4+8+4 L:24.0 W:15.0 H:31.0	
145	SQ2418	0.2*1.5*70TS	20.0mH	145.0	3.00	17*21.5 L:24.0 W:26.5 H:15.5	
146	SQ2418	0.25*1.2*55TS	15.0mH	130.0	3.00	10*13 L:24.0 W:16.0 H:33.5	
147	SQ2418	0.25*1.5*60TS	15.0mH	120.0	3.75	10*13 L:24.0 W:15.0 H:31.0	

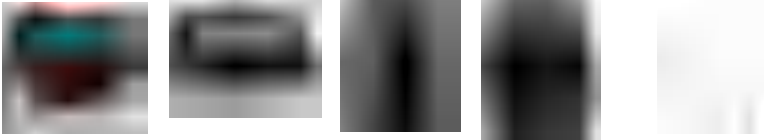

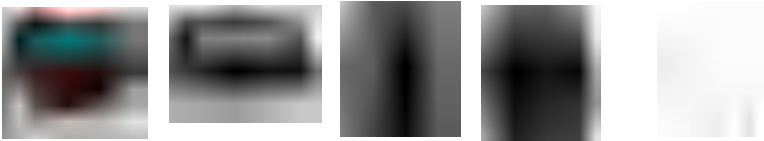
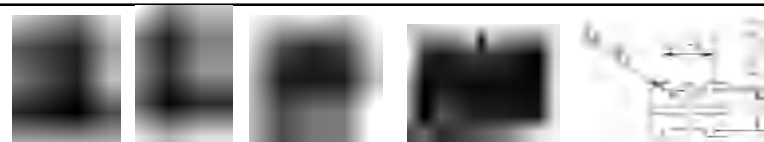
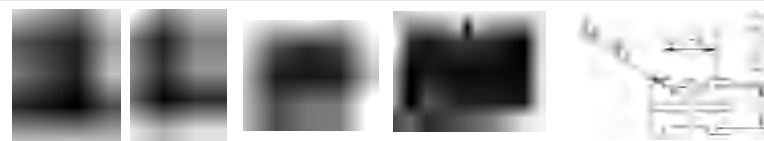

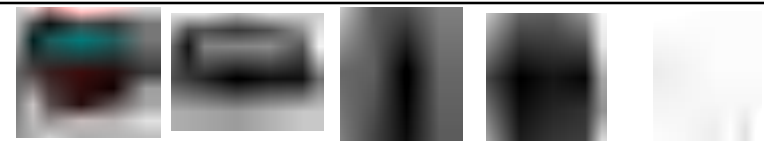
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
148	SQ2418	0.25*1.5*60TS	15.0mH	120.0	3.75	17*21.5 L:24.0 W:26.5 H:15.5	
149	SQ2418	0.3*1.5*49TS	10.0mH	90.0	4.50	10*13 L:24.0 W:15.0 H:31.0	
150	SQ2418	0.3*1.5*49TS	10.0mH	90.0	4.50	17*21.5 L:24.0 W:26.5 H:15.5	
151	SQ2418	0.35*1.5*43TS	8.0mH	70.0	5.25	10*13 L:24.0 W:15.0 H:31.0	
152	SQ2418	0.4*1.5*38TS	7.0mH	60.0	6.00	10*13 L:24.0 W:15.0 H:31.0	
153	SQ2418	0.45*1.5*34TS	5.0mH	50.0	6.80	10*13 L:24.0 W:15.0 H:31.0	
154	SQ2418	0.4*1.5*38TS	7.0mH	60.0	6.00	17*21.5 L:24.0 W:26.5 H:15.5	

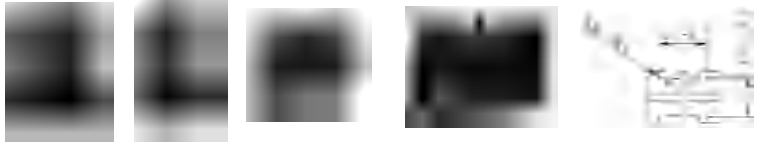
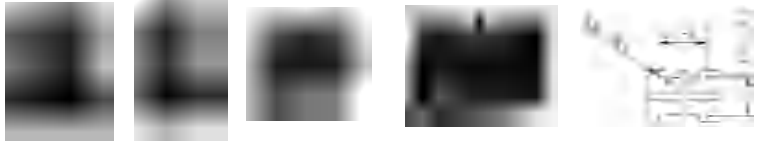
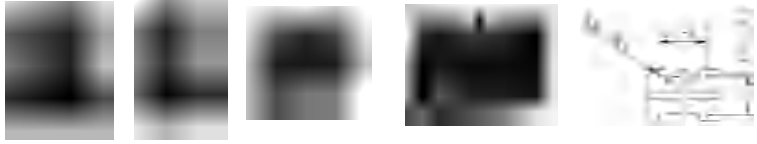
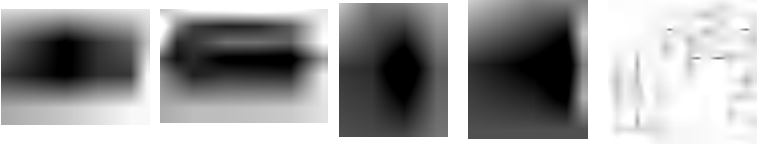
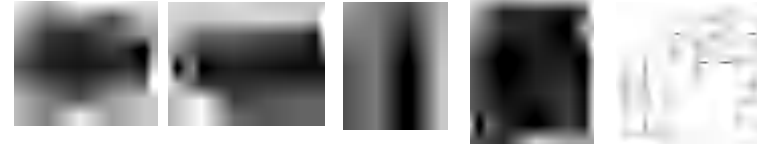

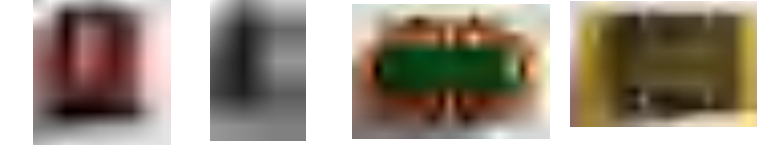
# Flat wire common mode choke coil product list

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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
155	SQ2418	0.55*1.5*27TS	4.0mH	40.0	8.20	10*13 L:24.0 W:15.0 H:31.0	
156	SQ2418	0.53*2.0*30TS	4.0mH	30.0	10.60	10*13 L:24.0 W:15.0 H:31.0	
157	SQ2418	0.6*2.0*26TS	3.0mH	25.0	12.00	10*13 L:24.0 W:15.0 H:31.0	
158	SQ2820	1.1*18TS	1.5mH	20.0	1.00	20*24.5 L:26.0 W:30.5 H:16.5	
159	SQ2820	0.3*1.5*60TS	12mH	90.0	4.50	20*25 L:26.0 W:30.5 H:16.5	
160	SQ2820	0.6*1.9*29	4.0mH	25.0	11.40	10*13 L:27.0 W:17.0 H:36.5	
161	SQ2820	1.1*2.5*17TS	1.5mH	6.0	25.00	10*14 L:27.0 W:17.0 H:36.5	

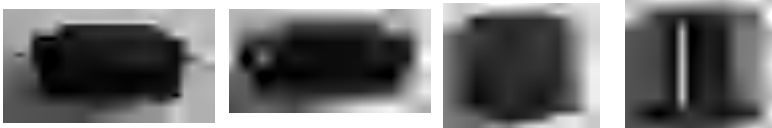

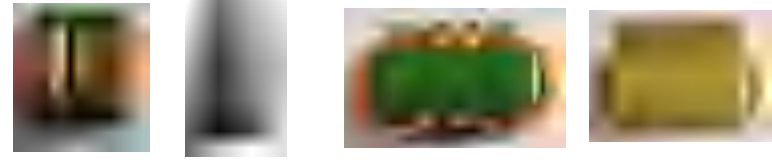

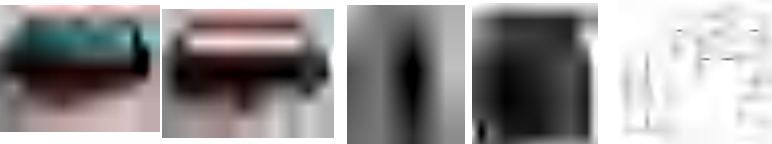
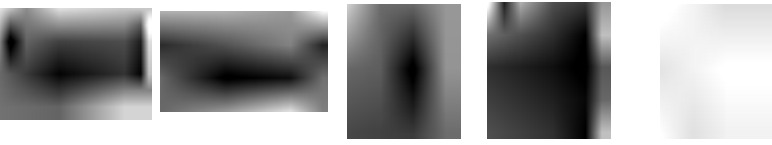

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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
162	SQ2821	0.25*1.5*52	9.0mH	100.0	3.75	24.5*40.4 L:41.5 W:33.0 H:13.5	
163	SQ2821	0.3*1.5*46TS	6.0mH	65.0	4.50	24.5*40.4 L:41.5 W:33.0 H:13.5	
164	SQ2824	0.8*2.0*16TS	2.0mH	10.0	16.00	9.5*12.5 L:32.0 W:18.5 H:31.5	
165	SQ2825	0.7*2.5*21TS	1.6	15.0	17.50	10*17 L:34.0 W:22.0 H:31.0	
166	SQ2918	0.3*1.5*60TS	12mH	90.0	4.50	20*25 L:26.0 W:30.5 H:16.5	
167	SQ2918	0.3*1.5*60TS	15mH	90.0	4.50	21*25.5 L:26.0 W:30.5 H:14.5	
168	SQ2918	0.3*1.5*60TS	12mH	90.0	4.50	10*13 L:25.5 W:15.0 H:35.5	

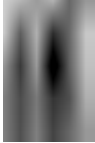
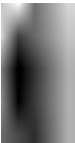



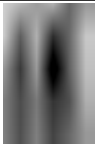
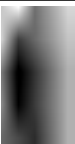
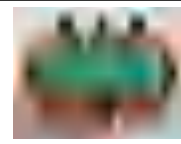
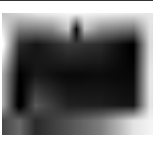


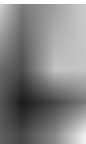



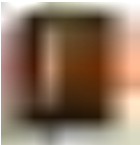
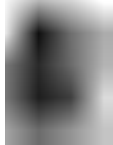




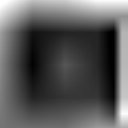
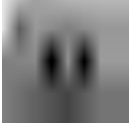


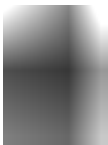

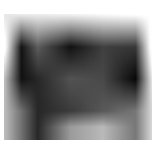

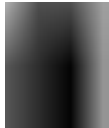
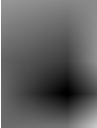

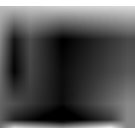
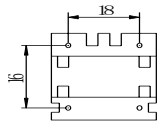
# Flat wire common mode choke coil product list

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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max					
169	SQ2918	0.35*1.5*53TS	9.0mH	80.0	5.25	10*13 L:25.5 W:15.0 H:35.5					
170	SQ2918	0.4*1.5*47TS	8.0mH	60.0	6.00	10*13 L:25.5 W:15.0 H:35.5					
171	SQ3126	0.6*1.0*32TS	4.0mH	45.0	6.00	16*18 L:31.0 W:23.5 H:43.0					
172	SQ3126	1.1*3.0*18TS	2.0mH	10.0	33.00	11*16 L:36.0 W:23.0 H:36.0					
173	SQ3126	2.0*10TS	700uH	4.0	31.40	8.6*21*30 L:36.0 W:35.0 H:18.5					
174	SQ3324	0.5*2.0*36TS	10.0mH	35.0	10.00	16*18 L:31.0 W:23.5 H:43.0					
175	SQ3324	0.6*1.8*32TS	6.0mH	50.0	10.80	16*18 L:36.0 W:23.5 H:43.0					


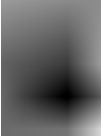

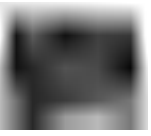







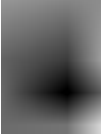

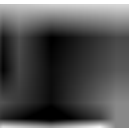
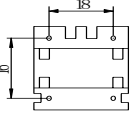

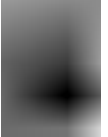

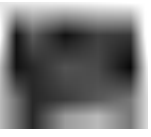




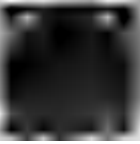

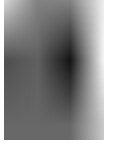



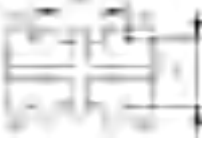

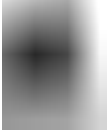


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Http: [www.shinhom.com](http://www.shinhom.com)

No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max					
176	SQ3324	0.6*1.8*32TS	6.0mH	50.0	10.80	16*18 L:31.0 W:23.5 H:43.0					
177	SQ3324	0.6*1.8*32TS	6.0mH	50.0	10.80	20*26 L:33.5 W:34.0 H:19.0					
178	SQ3324	0.8*1.8*24TS	4.0mH	30.0	14.40	16*18 L:31.0 W:23.5 H:43.0					
179	SQ3324	0.8*1.8*24TS	4.0mH	30.0	14.40	16*18 L:31.0 W:23.5 H:43.0					
180	SQ3324	0.8*1.8*24TS	4.0mH	30.0	14.40	20*26 L:33.5 W:34.0 H:19.0					
181	SQ3324	0.8*2.0*23TS	4.0mH	15.0	16.00	12*18 L:33.0 W:20.0 H:43.0					
182	SQ3324	1.1*2.5*18TS	1.5mH	6.0	27.50	8*17 L:35.0 W:21.5 H:36.0					


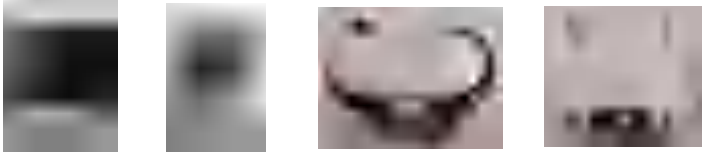
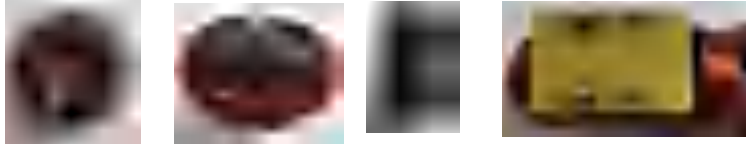
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No.	Part No.	Wire diameter & Turns	L(mH)Min 1KHz,0.25V	DCR (mΩ) Max	Current (A)Max	Size(mm) Max	
183	SQ3325	0.55*1.8*28	5.0mH	30.0	9.90	16*18 L:32.5 W:23.5 H:43.0	
184	SQ3325	2.0*10TS	200 uH	10.0	31.00	16*18 L:33.0 W:22.5 H:29.5	
185	TRF 522116 -60	1*3*43TS	200 uH	30.0	30.00	11*16 L:64.0 W:26.0 H:62.0	

# AUTO FLAT WIRE COMMON MODE CHOKES

## SQ1212 SERIES



### FEATURES:

- High current, low profile, high efficiency, low temperature rise
- Interturn capacitance is smaller than toroidal core, high insulation strength and high reliability
- Use the flat wire, improving the space factor
- Single phase winding, thereby dramatically reduce stray capacitance
- EMI suppression is excellent

### ELECTRICAL CHARACTERISTICS:

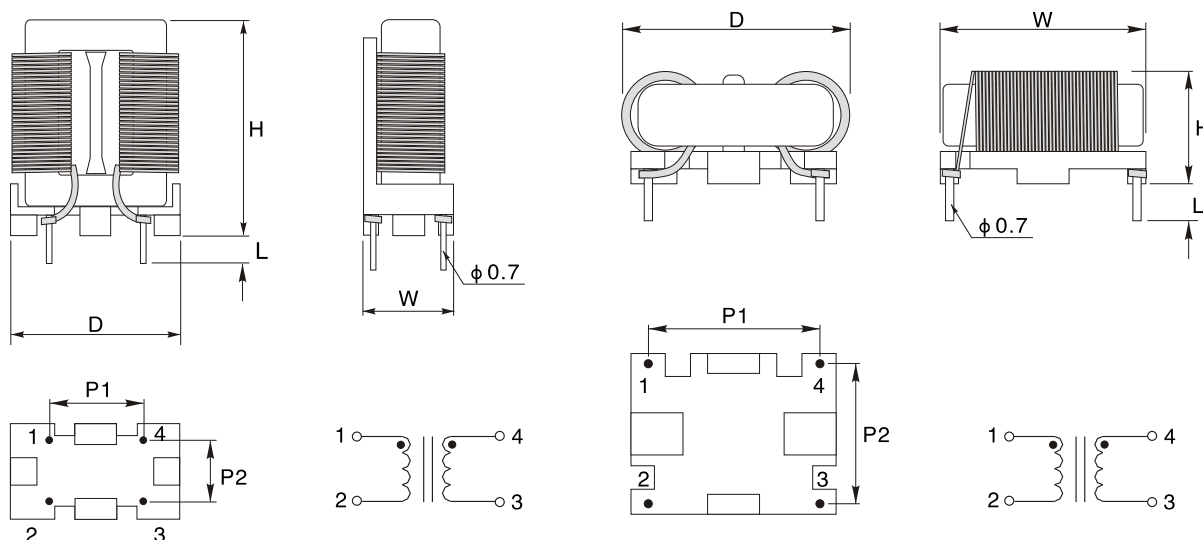
Part Number	Inductance (mH)Min @1KHz,0.1V	Rated current (A)Max	DCR (mΩ)Max	Rated voltage (V)
SQ1212H/VA-502Y-2.0A	5.0	2.0	100	300
SQ1212H/VA-103Y-1.5A	10.0	1.5	150	300
SQ1212H/VB-103Y-1.3A	10.0	1.3	200	300
SQ1212H/VA-253Y-1.0A	25.0	1.0	300	300

### NOTES:

- Operating Temperature Range(Ambient Temperature Range and Winding Temperature Rise) : -30°C to 120°C
- Winding Temperature Rise(at Rated Current)is under 55°C
- Rising temperature is affected by PCB condition and an amount of harmonics.Please make sure that the temperature of the coil is not exceeded the operating temperature range.

### PHYSICAL CHARACTERISTICS:

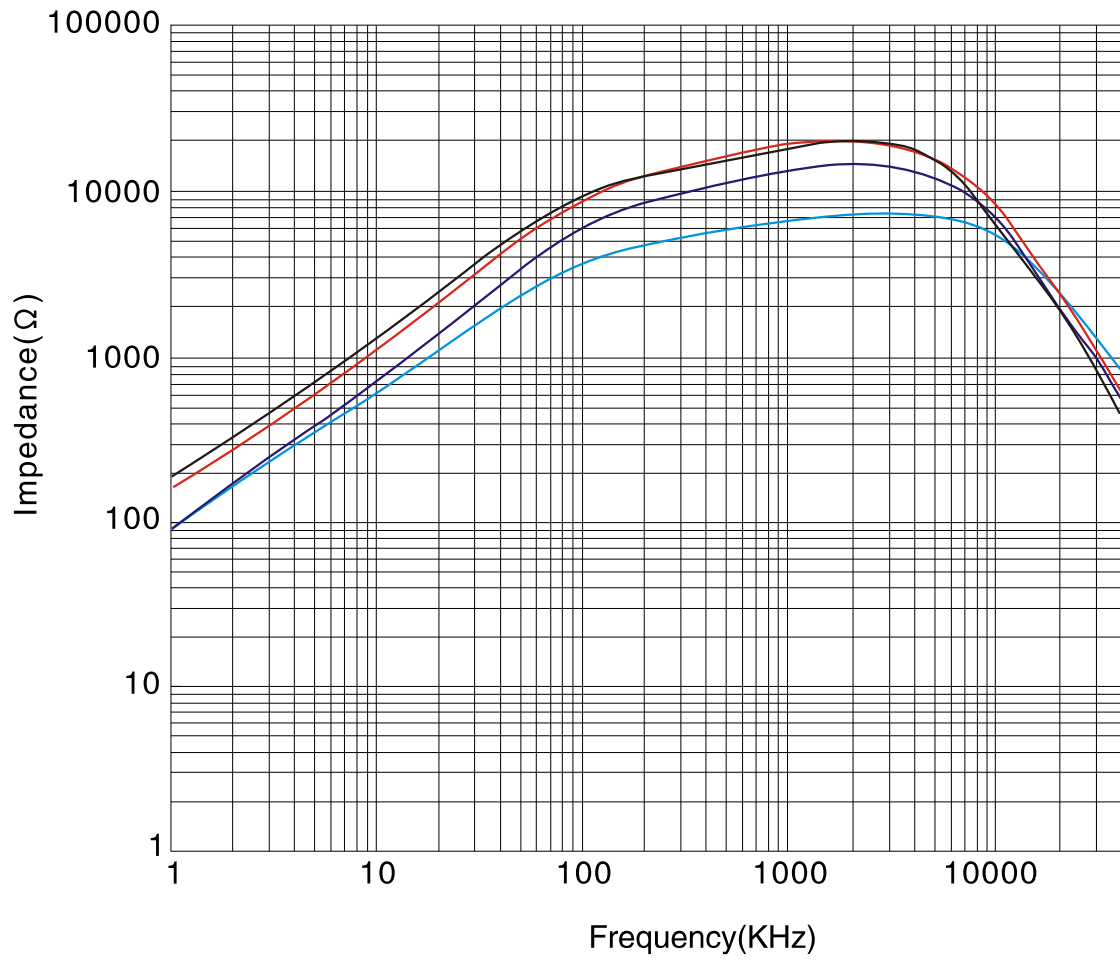
DIMENSIONS IN:mm



Part Number	D(mm)	W(mm)	H(mm)	L(mm)	Pin pitch (mm)
SQ1212VA-502Y-2.0A	18.5	11.0	17.0	3.5±1	11.0*8.0
SQ1212VA-103Y-1.5A	18.5	11.0	17.0	3.5±1	11.0*8.0
SQ1212VB-103Y-1.3A	18.5	11.0	17.0	3.5±1	8.0*7.0
SQ1212VA-253Y-1.0A	19.0	12.0	17.0	3.5±1	8.0*7.0
SQ1212HA-502Y-2.0A	18.5	14.0	12.0	3.5±1	13.0*10.0
SQ1212HA-103Y-1.5A	19.0	14.5	13.5	3.5±1	13.0*10.0
SQ1212HB-103Y-1.3A	18.5	14.0	12.0	3.5±1	13.0*10.0
SQ1212HA-253Y-1.0A	18.5	14.0	12.0	3.5±1	13.0*10.0

# AUTO FLAT WIRE COMMON MODE CHOKES

## IMPEDANCE VS FREQUENCY:



- SQ1212H/VA-502Y-2.0A —
- SQ1212H/VA-103Y-1.5A —
- SQ1212H/VB-103Y-1.3A —
- SQ1212H/VA-253Y-1.0A —

# AUTO FLAT WIRE COMMON MODE CHOKES SQ1515 SERIES



## FEATURES:

- High current, low profile, high efficiency, low temperature rise
- Interturn capacitance is smaller than toroidal core, high insulation strength and high reliability
- Use the flat wire, improving the space factor
- Single phase winding, thereby dramatically reduce stray capacitance
- EMI suppression is excellent

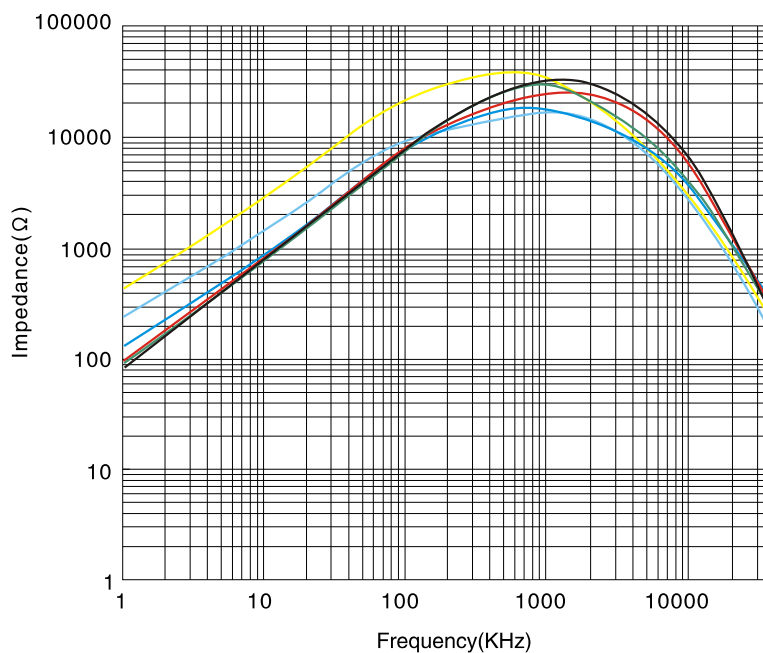
## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)Min @1KHz,0.1V	Rated current (A)Max	DCR (mΩ)Max	Rated voltage (V)
SQ1515H/VA-353Y-1.0A	35.0	1.0	380	300
SQ1515H/VB-103Y-1.5A	10.5+50%/-30%	1.5	180	300
SQ1515H/VA-103Y-1.5A	10.0	1.5	180	300
SQ1515H/VA-702Y-1.8A	7.0	1.8	150	300
SQ1515H/VA-143Y-2.0A	14.0	2.0	120	300
SQ1515H/VA-183Y-2.0A	18.0	2.0	130	300

## NOTES:

- Operating Temperature Range(Ambient Temperature Range and Winding Temperature Rise) : -30°C to 120°C
- Winding Temperature Rise(at Rated Current)is under 55°C
- Rising temperature is affected by PCB condition and an amount of harmonics.Please make sure that the temperature of the coil is not exceeded the operating temperature range.

## IMPEDANCE VS FREQUENCY:



- SQ1515H/VA-353Y-1.0A —
- SQ1515H/VB-103Y-1.5A —
- SQ1515H/VA-103Y-1.5A —
- SQ1515H/VA-702Y-1.8A —
- SQ1515H/VA-143Y-2.0A —
- SQ1515H/VA-183Y-2.0A —

# AUTO FLAT WIRE COMMON MODE CHOKES

## PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm

Fig 1

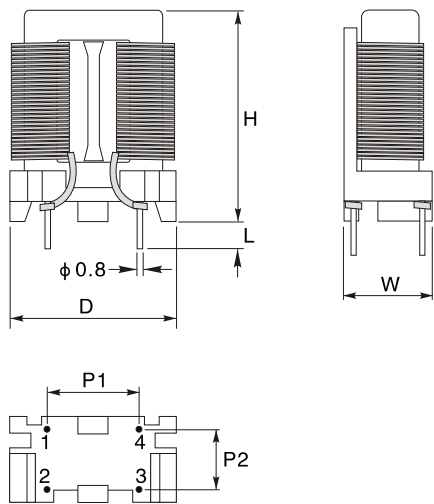


Fig 2

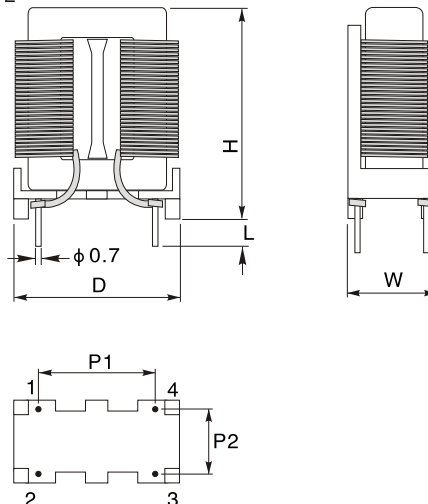
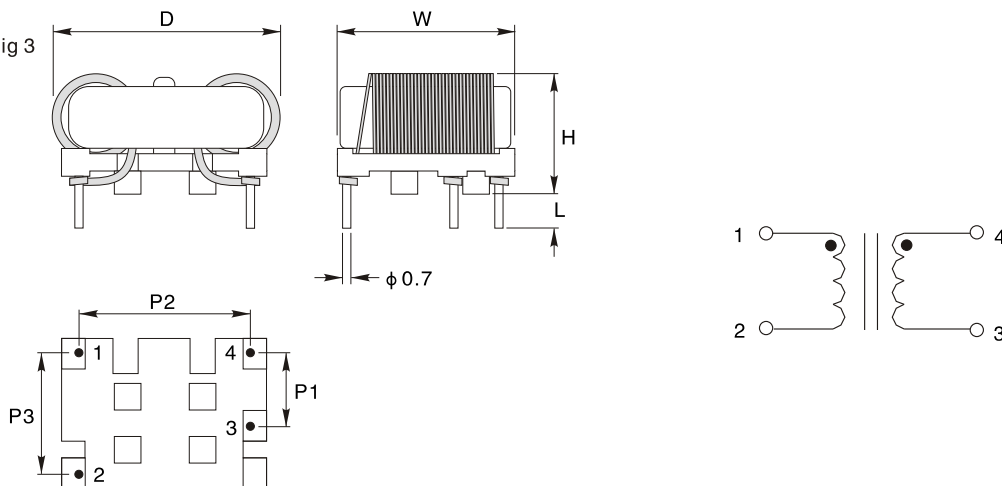


Fig 3



Part Number	D(mm)	W(mm)	H(mm)	L(mm)	Pin pitch(mm)	Fig.
SQ1515H/VA-353Y-1.0A	21.0	14.5	20.5	3.5 ± 1	13.0*10.0	1
SQ1515H/VB-103Y-1.5A	21.0	14.5	20.5	3.5 ± 1	13.0*10.0	1
SQ1515H/VA-103Y-1.5A	21.0	14.5	20.5	3.5 ± 1	13.0*10.0	1
SQ1515H/VA-702Y-1.8A	21.0	14.5	20.5	3.5 ± 1	13.0*10.0	1
SQ1515H/VA-143Y-2.0A	22.0	14.5	20.0	3.5 ± 1	13.0*10.0	1
SQ1515H/VA-183Y-2.0A	21.8	13.8	20.8	3.5 ± 1	10.0*8.0	2
SQ1515H/VA-353Y-1.0A	21.0	17.0	14.0	3.5 ± 1	9.0*17.0*12.9	3
SQ1515H/VB-103Y-1.5A	23.0	17.0	14.0	3.5 ± 1	9.0*17.0*12.9	3
SQ1515H/VA-103Y-1.5A	21.0	17.0	14.0	3.5 ± 1	9.0*17.0*12.9	3
SQ1515H/VA-702Y-1.8A	21.0	17.0	14.0	3.5 ± 1	9.0*17.0*12.9	3
SQ1515H/VA-143Y-2.0A	23.0	17.0	16.0	3.5 ± 1	9.0*17.0*12.9	3
SQ1515H/VA-183Y-2.0A	23.0	17.0	16.0	3.5 ± 1	9.0*17.0*12.9	3

# AUTO FLAT WIRE COMMON MODE CHOKES

## SQ1919 SERIES



### FEATURES:

- High current, low profile, high efficiency, low temperature rise
- Interturn capacitance is smaller than toroidal core, high insulation strength and high reliability
- Use the flat wire, improving the space factor
- Single phase winding, thereby dramatically reduce stray capacitance
- EMI suppression is excellent

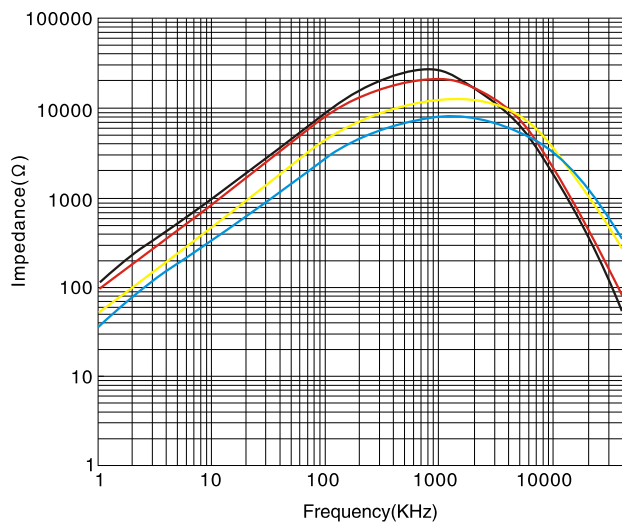
### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)Min @100KHz,0.1V	Rated current (A)Max	DCR (mΩ)Max	Rated voltage (V)
SQ1919H/VA-303Y-1.3A	30.0(1KHz)	1.3	300	300
SQ1919H/VA-173Y-1.5A	17.0+50%/-30%	1.5	200	300
SQ1919H/VA-113Y-2.0A	11.0+50%/-30%	2.0	155	300
SQ1919H/VA-103Y-3.0A	10.0(1KHz)	3.0	120	300
SQ1919H/VA-402Y-3.5A	4.0	3.5	70	300
SQ1919H/VA-702Y-3.5A	7.0(1KHz)	3.5	70	300
SQ1919H/VB-702Y-4.5A	7.0(1KHz)	4.5	60	300
SQ1919H/VA-502Y-5.0A	5.0+50%/-30%(1KHz)	5.0	50	300

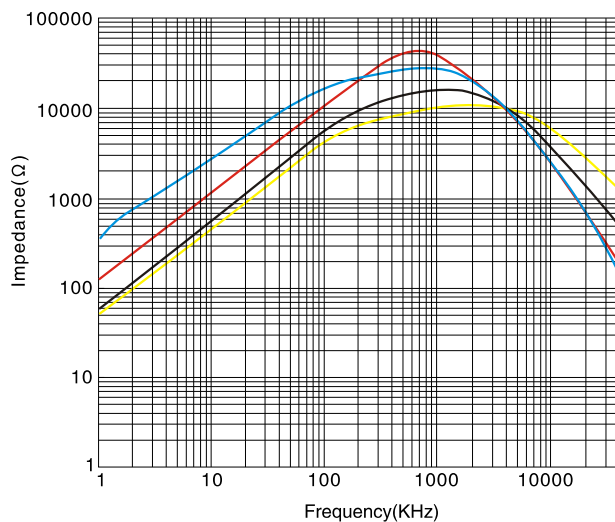
### NOTES:

- Operating Temperature Range(Ambient Temperature Range and Winding Temperature Rise) : -30°C to 120°C
- Winding Temperature Rise(at Rated Current)is under 55°C
- Rising temperature is affected by PCB condition and an amount of harmonics.Please make sure that the temperature of the coil is not exceeded the operating temperature range.

### IMPEDANCE VS FREQUENCY:



- SQ1919H/VA-103Y-3.0A ————
- SQ1919H/VB-702Y-4.5A ————
- SQ1919H/VA-113Y-2.0A ————
- SQ1919H/VA-402Y-3.5A ————



- SQ1919H/VA-173Y-1.5A ————
- SQ1919H/VA-502Y-5.0A ————
- SQ1919H/VA-702Y-3.5A ————
- SQ1919H/VA-303Y-1.3A ————

# AUTO FLAT WIRE COMMON MODE CHOKES

## PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm

Fig 1

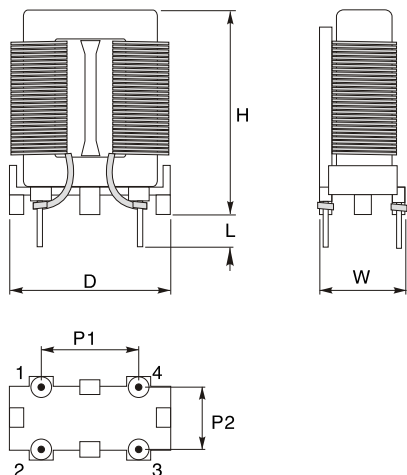


Fig 2

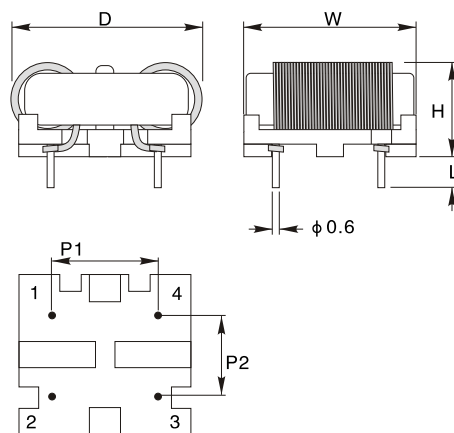
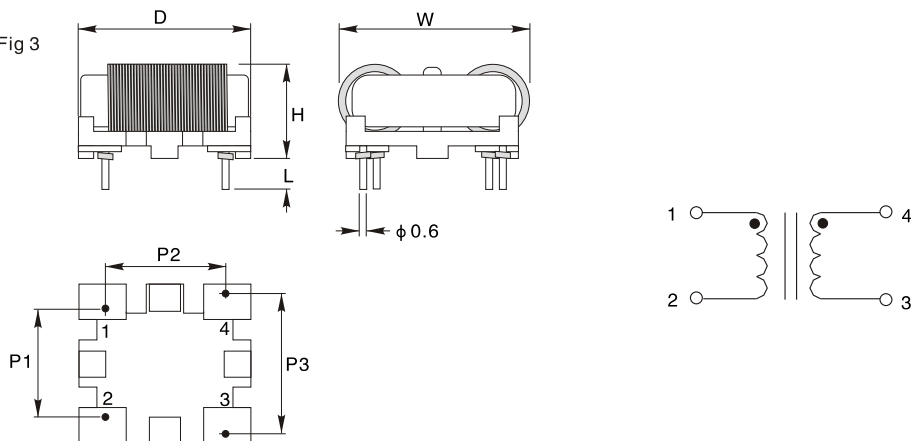


Fig 3



Part Number	D(mm)	W(mm)	H(mm)	L(mm)	Pin pitch(mm)	Fig.
SQ1919H/VA-303Y-1.3A	23.5	14.0	25.5	3.5 ± 1	13.0*10.0	1
SQ1919H/VA-173Y-1.5A	23.5	14.0	25.5	3.5 ± 1	13.0*10.0	1
SQ1919H/VA-113Y-2.0A	23.5	14.0	25.5	3.5 ± 1	13.0*10.0	1
SQ1919H/VA-103Y-3.0A	24.0	14.0	25.5	3.5 ± 1	13.0*10.0	1
SQ1919H/VA-402Y-3.5A	23.5	14.0	25.5	3.5 ± 1	13.0*10.0	1
SQ1919H/VA-702Y-3.5A	24.5	15.0	25.5	3.5 ± 1	13.0*10.0	1
SQ1919H/VB-702Y-4.5A	26.0	15.0	26.0	3.5 ± 1	13.0*10.0	1
SQ1919H/VA-502Y-5.0A	23.5	14.0	25.5	3.5 ± 1	13.0*10.0	1
SQ1919H/VA-303Y-1.3A	22.5	20.5	13.5	3.5 ± 1	17.0*15.5	2
SQ1919H/VA-173Y-1.5A	24.0	23.0	13.5	3.5 ± 1	17.0*15.5	2
SQ1919H/VA-113Y-2.0A	24.0	23.0	13.5	3.5 ± 1	17.0*15.5	2
SQ1919H/VA-103Y-3.0A	24.0	21.0	14.0	3.5 ± 1	17.0*15.5	2
SQ1919H/VA-402Y-3.5A	26.0	23.0	16.5	3.5 ± 1	17.0*15.5	2
SQ1919H/VA-702Y-3.5A	25.0	22.5	15.0	3.5 ± 1	15.0*18.0*17.0	3
SQ1919H/VB-702Y-4.5A	24.0	21.0	15.0	3.5 ± 1	17.0*15.5	2
SQ1919H/VA-502Y-5.0A	24.0	22.0	15.0	3.5 ± 1	17.0*15.5	2

# AUTO FLAT WIRE COMMON MODE CHOKES SQ2418 SERIES



## FEATURES:

- High current, low profile, high efficiency, low temperature rise
- Interturn capacitance is smaller than toroidal core, high insulation strength and high reliability
- Use the flat wire, improving the space factor
- Single phase winding, thereby dramatically reduce stray capacitance
- EMI suppression is excellent

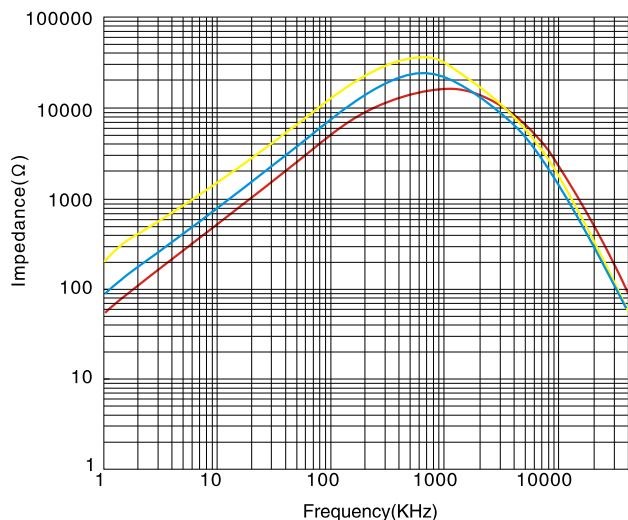
## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)Min @ 1KHz,0.1V	Rated current (A)Max	DCR (mΩ)Max	Rated voltage (V)
SQ2418H/VA-283Y-2.0A	28.0	2.0	260	300
SQ2418H/VA-293Y-2.5A	29.0+50%/-30%	2.5	175	300
SQ2418H/VA-173Y-4.0A	17.0	4.0	110	300
SQ2418H/VA-802Y-4.5A	8.0(100KHz)	4.5	85	300
SQ2418H/VA-602Y-6.0A	6.0+50%/-30%(100KHz)	6.0	50	300
SQ2418H/VA-202Y-10.0A	2.0	10.0	25	300

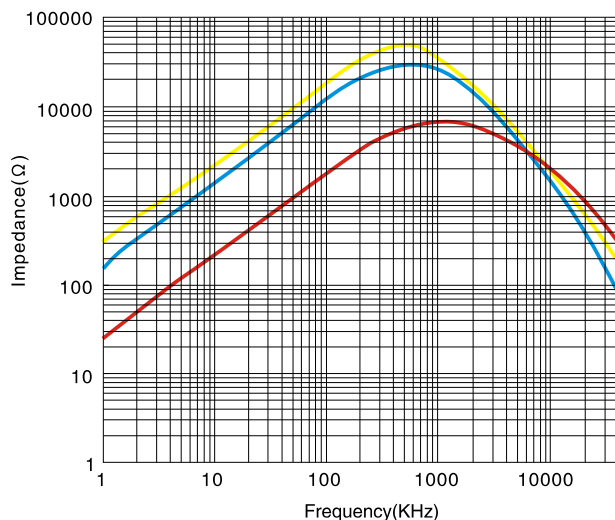
### NOTES:

- Operating Temperature Range(Ambient Temperature Range and Winding Temperature Rise) : -30°C to 120°C
- Winding Temperature Rise(at Rated Current)is under 55°C
- Rising temperature is affected by PCB condition and an amount of harmonics.Please make sure that the temperature of the coil is not exceeded the operating temperature range.

## IMPEDANCE VS FREQUENCY:



- SQ2418H/VA-602Y-6.0A ————
- SQ2418H/VA-293Y-2.5A ————
- SQ2418H/VA-802Y-4.5A ————



- SQ2418H/VA-202Y-10.0A ————
- SQ2418H/VA-283Y-2.0A ————
- SQ2418H/VA-173Y-4.0A ————

# AUTO FLAT WIRE COMMON MODE CHOKES

## PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm

Fig 1

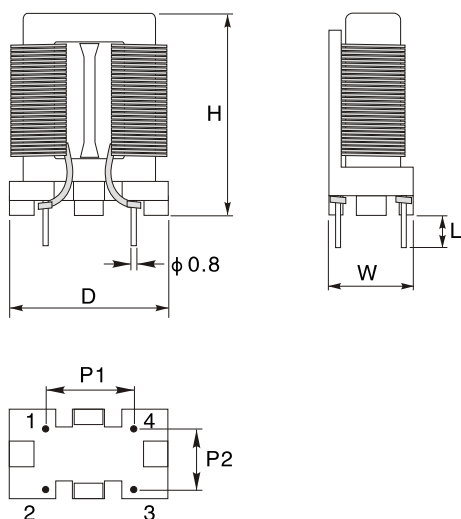


Fig 2

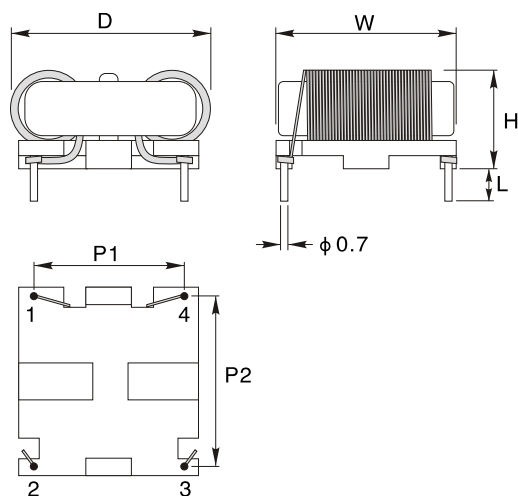
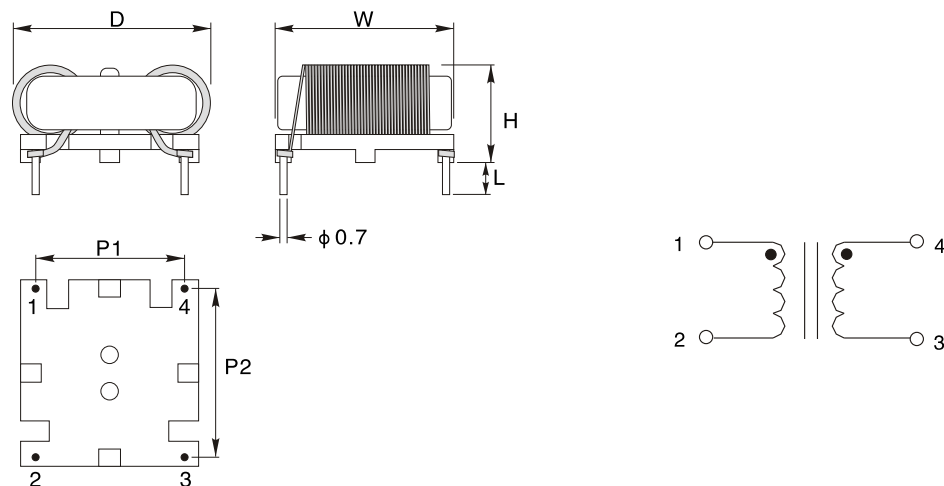


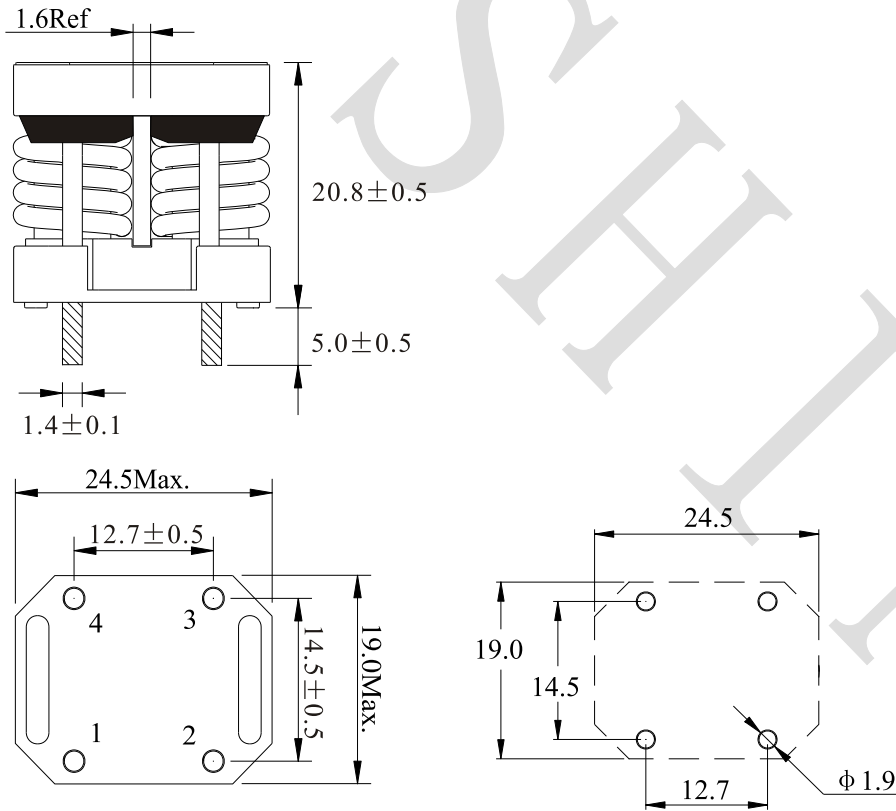
Fig 3



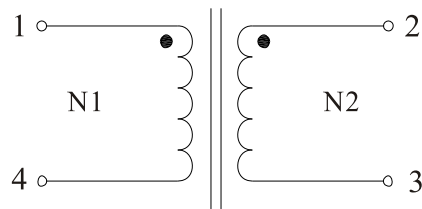
Part Number	D(mm)	W(mm)	H(mm)	L(mm)	Pin pitch(mm)	Fig.
SQ2418H/VA-283Y-2.0A	24.0	14.0	32.0	3.5 ± 1	13.0*10.0	1
SQ2418H/VA-293Y-2.5A	24.0	14.5	32.0	3.5 ± 1	13.0*10.0	1
SQ2418H/VA-173Y-4.0A	24.0	14.5	32.0	3.5 ± 1	13.0*10.0	1
SQ2418H/VA-802Y-4.5A	24.0	14.0	32.0	3.5 ± 1	13.0*10.0	1
SQ2418H/VA-602Y-6.0A	24.0	14.0	32.0	3.5 ± 1	13.0*10.0	1
SQ2418H/VA-202Y-10.0A	24.0	14.5	32.0	3.5 ± 1	13.0*10.0	1
SQ2418H/VA-283Y-2.0A	24.0	26.0	15.5	3.5 ± 1	17.0*21.5	2
SQ2418H/VA-293Y-2.5A	24.0	26.0	15.0	3.5 ± 1	17.0*21.5	2
SQ2418H/VA-173Y-4.0A	26.0	26.0	15.5	3.5 ± 1	17.0*21.5	2
SQ2418H/VA-602Y-6.0A	26.0	25.5	14.0	3.5 ± 1	17.0*21.5	2
SQ2418H/VA-202Y-10.0A	24.0	28.0	15.0	3.5 ± 1	20.0*22.5	3

Rev.	Description	Date
A0	New release	2023.12.29

### 1. PHYSICAL CHARACTERISTICS (mm)



### 2. ELECTRONICAL SCHEMATIC



### 3. ELECTRONICAL SPECIFICATIONS @25°C

Inductance: 120uH Min@100KHz,0.1V

IDC: 22.0A Max

RDC: 2.4mΩ Max

Operating temperature: -40°C to +125°C

(Including self-temp. rise)

Storage temperature: -40°C to +125°C

Test Instrument:

L: HP4284A

RDC: HM2540

Note:

1. Solderability: leads shall meet MIL-STD-202,

Method 208D for solderability.

2. Flammability: UL94V-0

3. ASTM oxygen index: >28%

NAME:	Common mode choke		
CUSTOMER P/N:		DATE:	2023-12-29
SHINHOM P/N:	SQ2420-121Y-22A	REV:	A0
DRAWN BY	CHECKED BY	APPROVE BY	

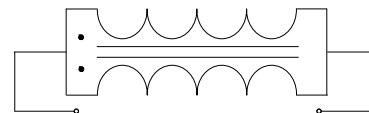
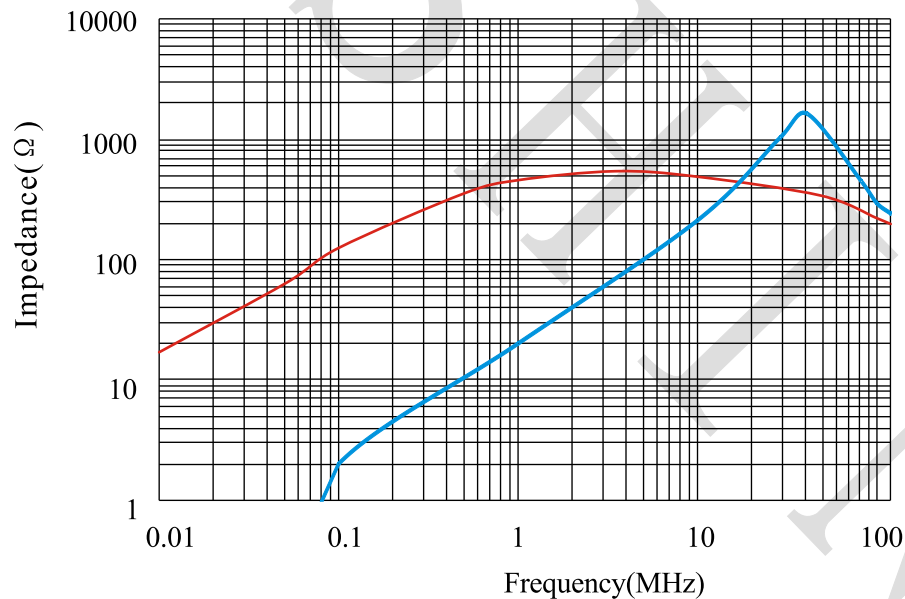


**SHINHOM**

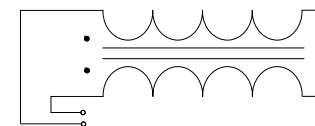
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Impedance vs Frequency



Common Mode



Differential Mode

Common mode: —

Differential mode: —

NAME:	Common mode choke		
CUSTOMER P/N:		DATE:	2023-12-29
SHINHOM P/N:	SQ2420-121Y-22A	REV:	A0 PAGE
DRAWN BY	CHECKED BY	APPROVE BY	



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# AUTO FLAT WIRE COMMON MODE CHOKES SQ2820 SERIES



## FEATURES:

- High current, low profile, high efficiency, low temperature rise
- Interturn capacitance is smaller than toroidal core, high insulation strength and high reliability
- Use the flat wire, improving the space factor
- Single phase winding, thereby dramatically reduce stray capacitance
- EMI suppression is excellent

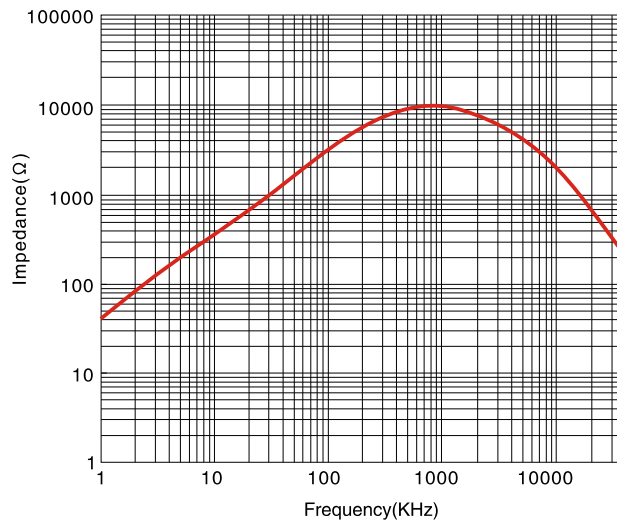
## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)Min @1KHz,0.1V	Rated current (A)Max	DCR (mΩ)Max	Rated voltage (V)
SQ2820H/V-602Y-11.0A	6.0±50%/-30%	11.0	25	300

### NOTES:

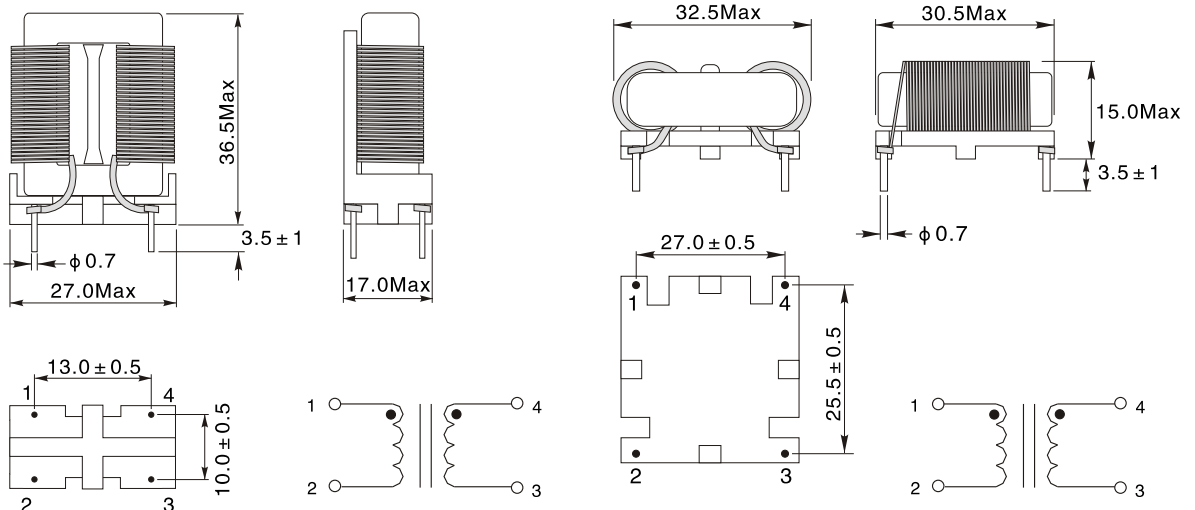
- Operating Temperature Range(Ambient Temperature Range and Winding Temperature Rise) : -30°C to 120°C
- Winding Temperature Rise(at Rated Current)is under 55°C
- Rising temperature is affected by PCB condition and an amount of harmonics.Please make sure that the temperature of the coil is not exceeded the operating temperature range.

## IMPEDANCE VS FREQUENCY:



## PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm



# AUTO FLAT WIRE COMMON MODE CHOKES SQ3324 SERIES



## FEATURES:

- High current, low profile, high efficiency, low temperature rise
- Interturn capacitance is smaller than toroidal core, high insulation strength and high reliability
- Use the flat wire, improving the space factor
- Single phase winding, thereby dramatically reduce stray capacitance
- EMI suppression is excellent

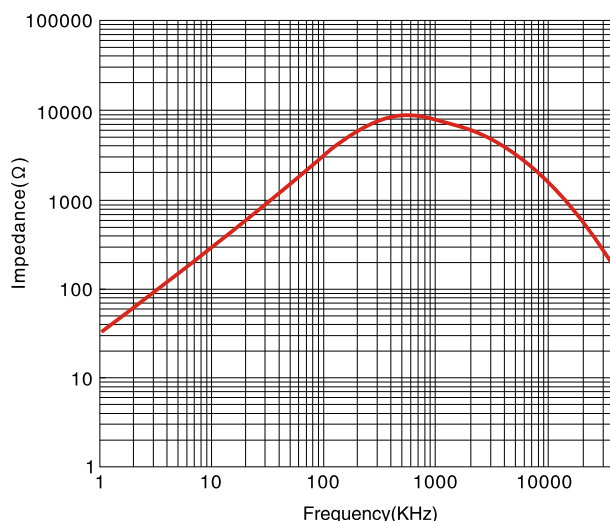
## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)Min @ 1KHz,0.1V	Rated current (A)Max	DCR (mΩ)Max	Rated voltage (V)
SQ3324V-402Y-15.0A	4.0	15.0	15	300

### NOTES:

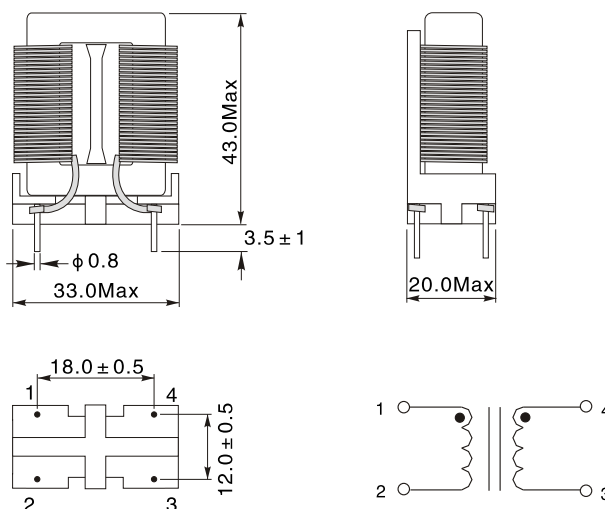
- Operating Temperature Range(Ambient Temperature Range and Winding Temperature Rise) : -30°C to 120°C
- Winding Temperature Rise(at Rated Current)is under 55°C
- Rising temperature is affected by PCB condition and an amount of harmonics.Please make sure that the temperature of the coil is not exceeded the operating temperature range.

## IMPEDANCE VS FREQUENCY:



## PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm



# SMD HIGH CURRENT FLAT WIRE COMMON MODE CHOKE SQS1212HP SERIES



## FEATURES:

- Compact size, low DCR, low leakage due to square core.
- High permeability material, High impedance at low frequency.
- High attenuation to noise, due to low stray capacitance.
- Flammability tested to IUL 94 V-0.
- Low cost, high consistency with automated production.
- RoHS, REACH compliance, Halogen free available.

## APPLICATIONS:

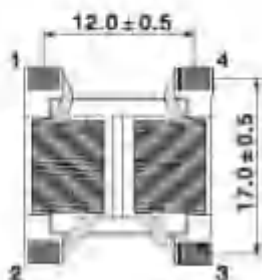
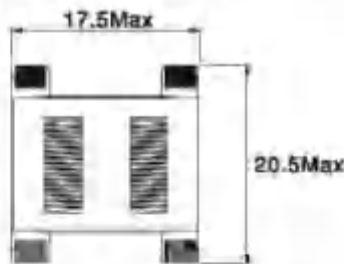
- Solutions for use in a wide array of power supply circuits.
- High density switching mode power supply devices.
- Ideal for use in consumer electronics and industrial applications: LCD TV, Battery chargers, Power Adapter, Home appliances.
- Space saving for existing Common Mode Chokes.

## ELECTRICAL CHARACTERISTICS:

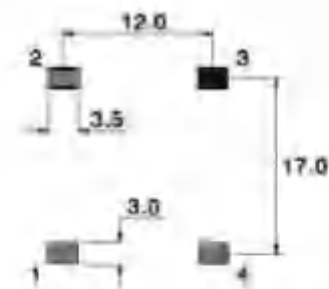
Part Number	Inductance (mH)/Min	Common mode peak impedance (kΩ)	Leakage Inductance (μH)Max	DCR (mΩ) Max	Rated current (A)Max
SQS1212HP-162Y	1.8	5.38 @ 2.89MHz	120	25	3.6
SQS1212HP-352Y	2.5	7.37 @ 2.56MHz	130	36	3.0
SQS1212HP-362Y	3.6	11.72 @ 2.34MHz	140	62	2.5
SQS1212HP-562Y	6.8	17.69 @ 2.23MHz	180	95	1.8
SQS1212HP-702Y	7.0	19.62 @ 2.15MHz	200	115	1.5
SQS1212HP-852Y	8.5	26.22 @ 2.01MHz	200	168	1.2
SQS1212HP-123Y	12.0	32.44 @ 1.55MHz	230	216	1.0
SQS1212HP-153Y	15.0	39.25 @ 1.15MHz	290	315	0.8
SQS1212HP-223Y	22.0	57.64 @ 0.85MHz	360	500	0.6

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

### DIMENSIONS IN: mm

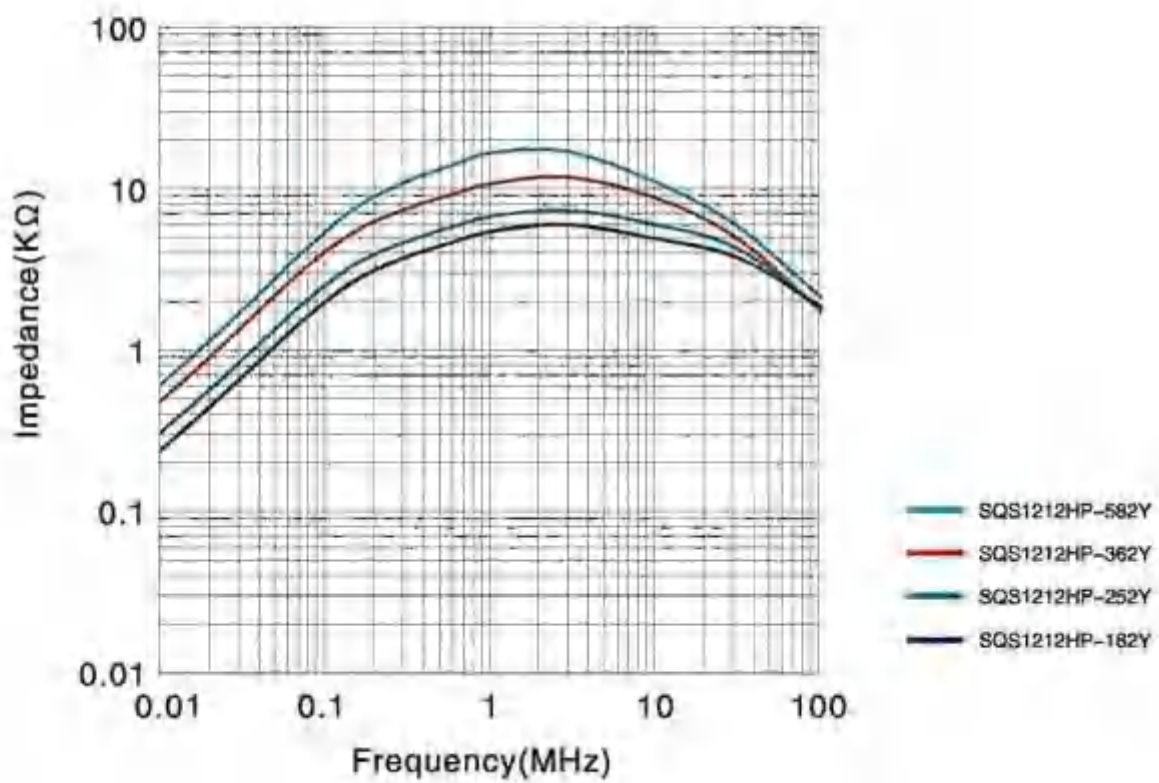
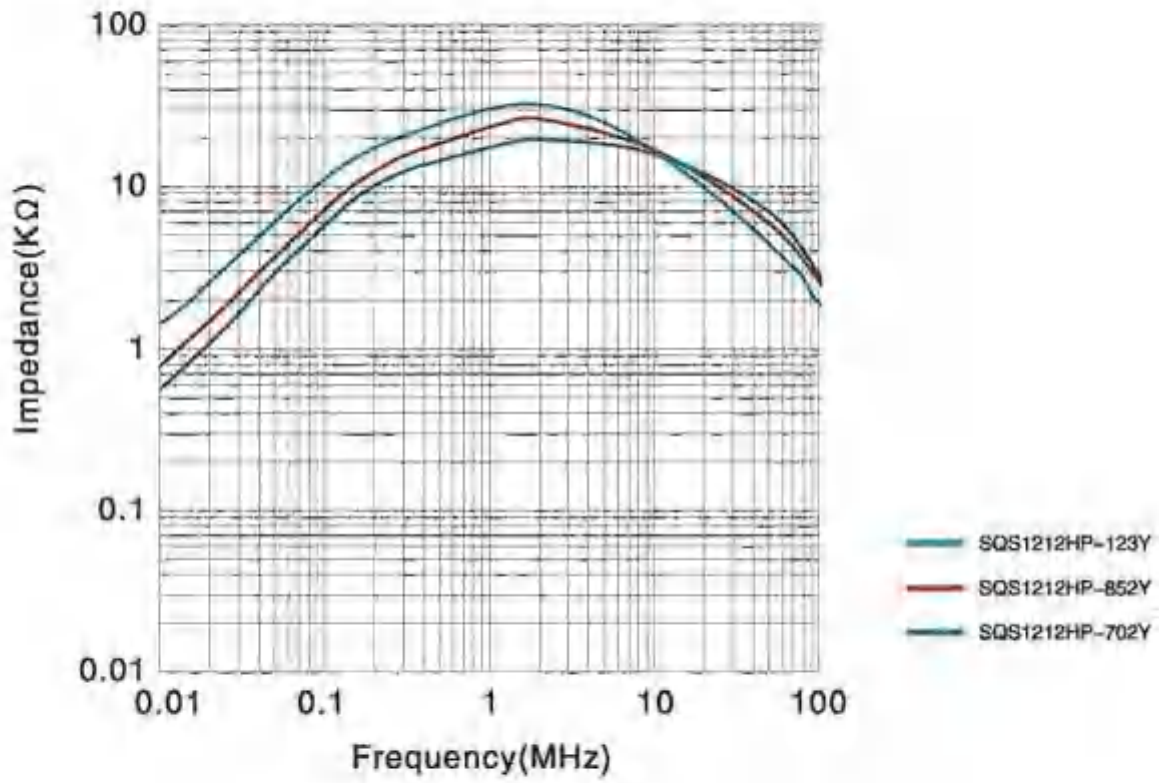


### LAND PATTERNS



- Inductor Testing: HP4284A (Equivalent acceptable)
- DCR: QuadTech 1880 Milliohmistor
- Rated voltage: 80VAC- 280VAC
- High withstanding voltage between windings: 2400VAC /60 sec.
- High insulation resistance 100MΩ Min @ 500VDC between windings.
- Operating temperature: -40°C- +125°C (Including coil temperature rise).
- Storage temperature: - 40°C- +65°C.
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E

# IMPEDANCE VS FREQUENCY:





# SMD Flat Common Mode Chokes

## SQS1515A SERIES

### FEATURES:

- Compact size, low DCR, low leakage due to square core
- High permeability material, High Impedance at low frequency
- High attenuation to noise due to low stray capacitance
- Flammability tested to UL94V-0
- High withstanding voltage between winding
- High insulation resistance
- Low cost, high consistency with automated production
- RoHS, REACH compliance

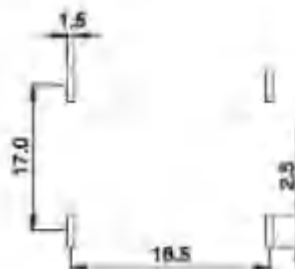
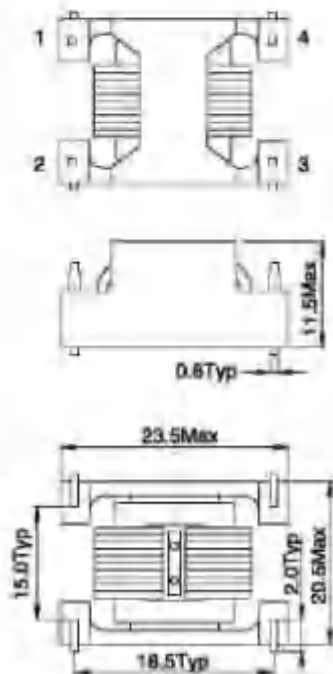
### APPLICATION:

- Solutions for use in a wide array of power supply circuits
- High density switching mode power supply devices
- Ideal for use in consumer electronics and industrial applications: LCD TV, Battery chargers, Power Adapter, Home appliances
- Space saving for existing Common Mode Chokes

### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Min. (mH)	DCR Max. (mΩ)	Rated current (A)
SQS1515A-203-1.5A	20.0	250	1.5-2.0
SQS1515A-153-1.8A	15.0	200	1.8-2.2
SQS1515A-163-2.0A	15.0	160	2.0-2.8
SQS1515A-103-3.0A	10.0	150	2.0-2.5
SQS1515A-103-2.5A	10.0	80	2.5-3.0
SQS1515A-502-2.5A	5.0	80	2.5-3.5
SQS1515A-302-3.5A	3.0	70	3.5-4.5
SQS1515A-202-5.0A	2.0	60	5.0-6.0

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



LAND PATTERNS



#### Note:

- Test frequency ..... 1.0kHz, 0.25V
- Rated voltage ..... 60Vac-280Vac
- Insulation voltage ..... 1.5kVac, 60Sec
- Operating temperature ..... -25°C to +125°C including coil temperature rise
- Storage temperature ..... -25°C to +100°C
- H<sub>g</sub>-Pwl ..... 2400Vac/60Sec
- Insulation resistance ..... 100MΩ Min @ 500Vdc
- Power range ..... 80W-120W



# SMD Flat Common Mode Chokes

## SQS1515B SERIES

### FEATURES:

- Compact size, low DCR, low leakage due to square core
- High permeability materials, high impedance at low frequency
- High insulation to noise, due to low stray capacitance
- Flameproofly isolated to UL 94V-0
- High withstanding voltage between winding
- High insulation resistance
- Low cost, high consistency with automated production
- RoHS, REACH compliance

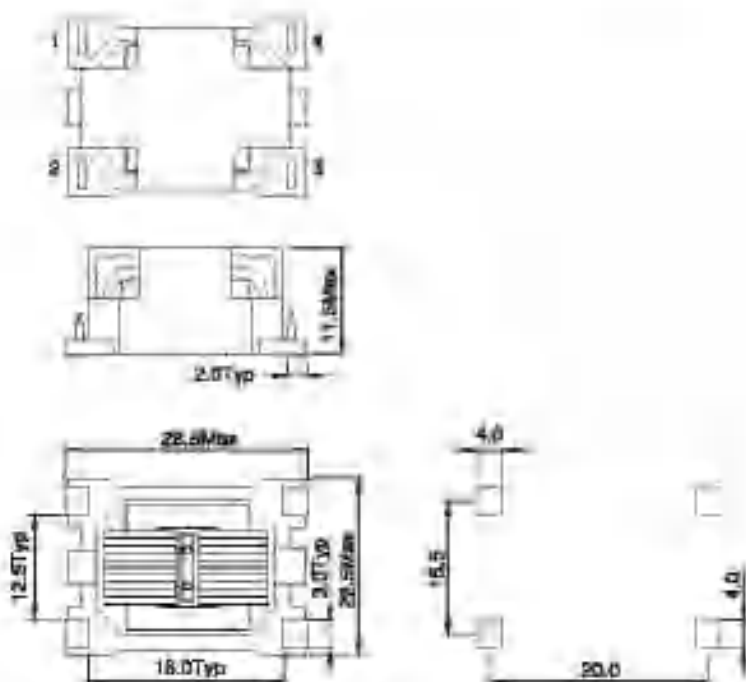
### APPLICATION:

- Solutions for use in a wide array of power supply circuits
- High density switching mode power supply devices
- Ideal for use in consumer electronics and industrial applications
- LED TV, Battery chargers, Power Adapter, Home appliances
- Space saving for existing Common Mode Choke

### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Min. (mH)	DCR Max. (mΩ)	Rated current (A)
SQS1515B-203-1.5A	20.0	350	1.5-2.0
SQS1515B-153-1.8A	15.0	200	1.8-2.2
SQS1515B-153-2.0A	15.0	180	2.0-2.8
SQS1515B-103-2.0A	10.0	150	2.0-2.5
SQS1515B-103-2.5A	10.0	80	2.5-3.0
SQS1515B-503-2.5A	5.0	80	2.5-3.5
SQS1515B-302-3.5A	3.0	70	3.5-4.5
SQS1515B-202-5.0A	2.0	60	5.0-6.0

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



#### Note:

- Test frequency ..... 1 (20Hz, 0.25V)
- Rated voltage ..... 80V/ac-380V/ac
- Insulation voltage ..... 1.5kV/ac, 60Sec
- Operating temperature ..... -25°C to +105°C (including coil temperature rise)
- Storage temperature ..... -25°C to +100°C
- HS-Pol ..... 2400V/ac, 60Sec
- Insulation resistance ..... 100MΩ Min @ 500VDC
- Power range ..... 60W-120W

#### LAND PATTERN



# SMD Flat Common Mode Chokes

## SQS1515C SERIES

### FEATURES:

- Compact size, low DCR, low leakage due to square core
- High permeability material, High impedance at low frequency
- High attenuation to noise, due to low stray capacitance
- Flammability tested to UL94V-0
- High withstanding voltage between winding
- High insulation resistance
- Low cost, high consistency with automated production
- RoHS, REACH compliance

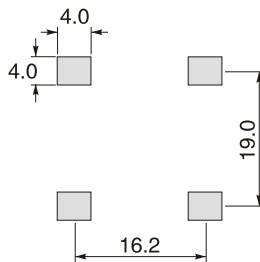
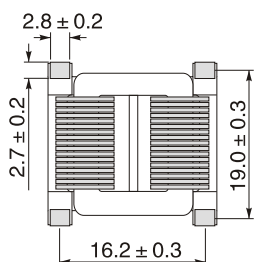
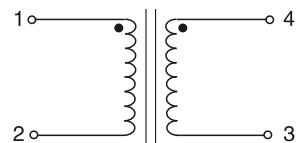
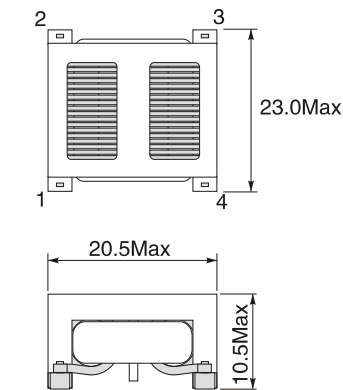
### APPLICATION:

- Solutions for use in a wide array of power supply elreuits
- High desity switching mode power supply devices
- Ideal for use in consumer electroinics and industrial applications: LCD TV, Battery chargers, Power Adapter, Home appliances
- Space saving for existing Common Mode Chokes

### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Min. (mH).	DCR Max. (mΩ).	Rated current (A)	Wire (mm)	Turns	Power (W)
SQS1515C-001	20-40	300	1.0-1.5	0.1*1.0	67	30-60
SQS1515C-002	15-30	220	1.3-1.8	0.13*1.0	56	30-60
SQS1515C-003	13-25	180	1.5-2.0	0.15*1.0	50	30-60
SQS1515C-004	13-25	160	1.8-2.5	0.15*1.2	50	65-80
SQS1515C-005	10-25	140	2.0-3.0	0.15*1.5	50	65-120
SQS1515C-006	5-15	140	2.0-2.5	0.2*1.0	40	60-80
SQS1515C-007	5-15	80	2.5-3.0	0.2*1.5	40	80-150
SQS1515C-008	4-10	100	2.0-2.8	0.25*1.0	33	80-150
SQS1515C-009	4-10	80	3.5-4.5	0.25*1.5	33	80-200
SQS1515C-010	2-5	60	3.0-3.8	0.3*1.2	27	80-200
SQS1515C-011	2-5	50	4.0-5.0	0.3*1.5	27	80-200
SQS1515C-012	1-4	40	5.0-6.0	0.35*1.5	24	80-200

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



LAND PATTERNS

Note:

- Test frequency .....1.0KHz,0.25V
- Rated voltage .....90Vac-250Vac
- Operating temperature .....-25°C to +125°C  
Including coil temperature rise
- Storage temperature .....-25°C to +100°C
- Hi-Pot..... 1500Vac/60Sec
- Insulation resistance.....100MΩ Min@500Vdc
- Power range .....30W-200W



# SMD Flat Common Mode Chokes

## SQS1918 SERIES

### FEATURES:

- Compact size, low DCR, low leakage due to square core
- High permeability material, high impedance at low frequency
- High saturation to noise, due to low stray capacitance
- Flameably tested to UL94V-0
- High withstanding voltage between winding
- High insulation resistance
- Low cost, high consistency with automated production
- RoHS, REACH compliance

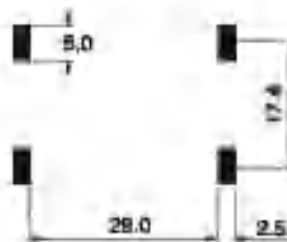
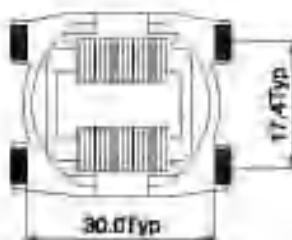
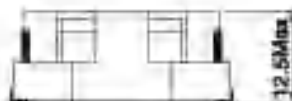
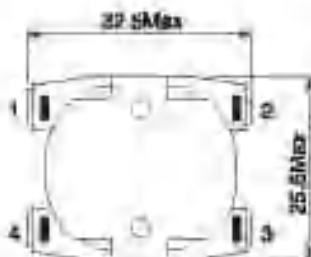
### APPLICATION:

- Solutions for use in a wide array of power supply circuits
- High steady switching mode power supply devices
- Ideal for use in consumer electronics and industrial applications: LCD TV, Battery charger, Power Adapter, Home appliances
- Space saving for existing Common Mode Chokes

### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Min. (mH)	DCR Max. (mΩ)	Rated current (A)
SQS1918-603-3.0A	6.0	100	3.0
SQS1918-125-2.0A	12.0	115	2.0
SQS1918-225-1.5A	22.0	150	1.5

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



LAND PATTERNS



#### Notes:

- Test frequency ..... 1.0KHz-0.25V
- Rated voltage ..... 30Vdc-330Vdc
- Insulation voltage ..... 1.5KVdc, 800Vdc
- Operating temperature ..... -25°C to +125°C including coil temperature rise
- Storage temperature ..... -25°C to +100°C
- I<sub>L</sub>-Pdc ..... 3400Vdc/30A
- Insulation resistance ..... 100M Ω Min @ 500Vdc



## SMD LINE FILTER STR0602 SERIES

### FEATURES:

- Compact design.
- Single layer winding for minimum capacitance.
- Meets UL 94V-0 flammability standard.
- Available on tape and reel for auto surface mounting.

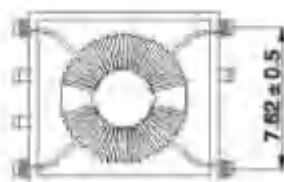
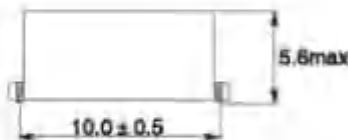
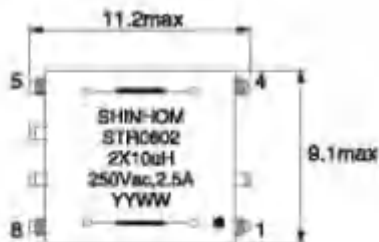
### APPLICATIONS:

- EMI filters.
- Personal computers.
- Communication equipment.

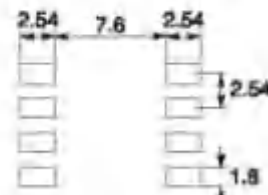
### ELECTRICAL CHARACTERISTICS:

Part Number	L1=L2( $\mu$ H) @ 10KHz, 0.1V $\pm 30\%$	DCR (winding) (m $\Omega$ ) max.	Rated Current (A) max.
STR0602-100N	10	25	2.5
STR0602-150N	15	40	2.0
STR0602-200N	20	70	1.5
STR0602-121N	120	25	2.5
STR0602-201N	200	40	2.0
STR0602-301N	300	70	1.5

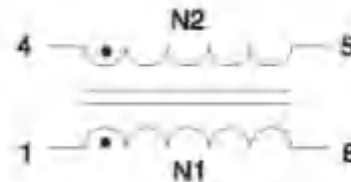
### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



Bottom view



Layout recommendation



- IDC Max: Determined when superimposed
  - Inductance test: HP4284A 10KHz 0.1V
  - RDC: QuadTech 1880 Milliohm meter
  - Operating temperature:  $-25^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$
  - Storage Temperature:  $-25^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$
  - Solder methods: Vapor Phase, Infrared Reflow
  - Resistance to soldering heat:  $260^{\circ}\text{C}$  for 10 seconds
  - Solvent resistance: Conforms to MIL-STD-202E
  - Marking: Inductance & Date
- Note: All specifications subject to change without notice.

# SMD LINE FILTER STR0603 SERIES



## FEATURES:

- SMD Housing
- High Frequency Design
- Excellent Mechanical Strength
- Excellent Solderability
- High Reliability
- Low Profile

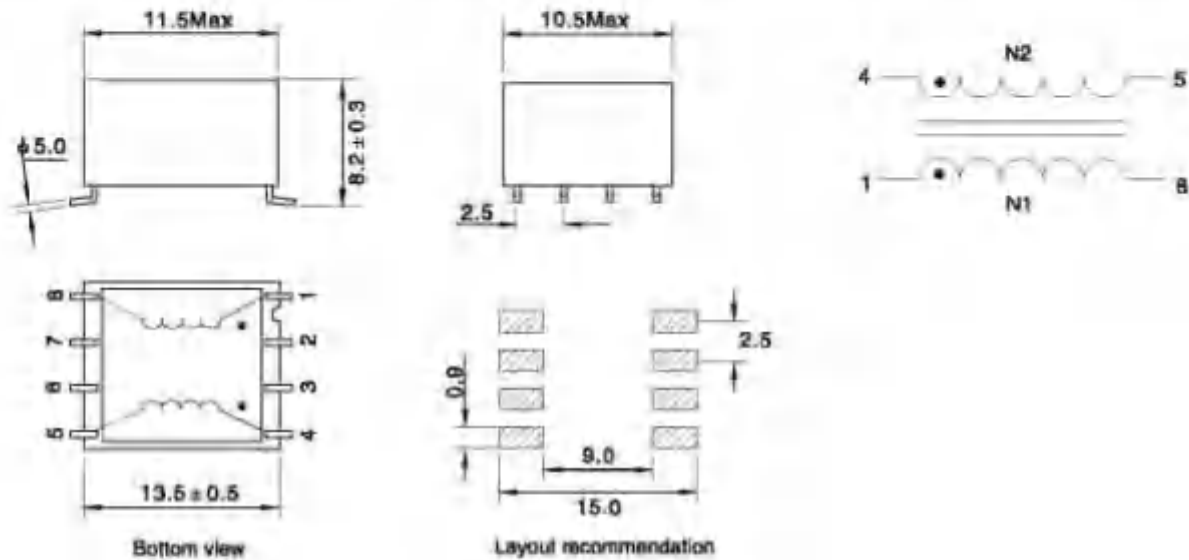
## COMMON APPLICATIONS:

- VCRs
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

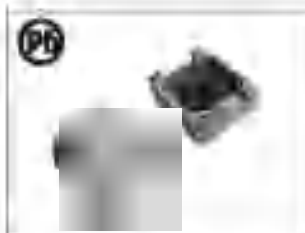
## ELECTRICAL CHARACTERISTICS:

Part Number	L mH	Test Freq KHz	DCR Ω Max	IDC A Max
STR0603-102Y	1.0	1	0.82	0.5
STR0603-501Y	0.5	1	0.45	0.6
STR0603-221Y	0.22	1	0.22	0.8
STR0603-151Y	0.15	1	0.15	1.0

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



- IDC Max: Determined when superimposed
  - Testing: (Equivalent acceptable) Inductance: HP4284A  
RDC: QuadTech 1880 Milliohmeter
  - Operating temperature: -40°C to +105°C
  - Storage Temperature: -40°C to +105°C
  - Solder methods: Vapor Phase, Infrared Reflow
  - Resistance to soldering heat: 260°C for 10 seconds
  - Solvent resistance: Conforms to MIL-STD-202E
  - Marking: Inductance & Tolerance
- Note: All specifications subject to change without notice.



## SMD LINE FILTER STR0903 SERIES

### FEATURES:

- Approx. 0.8% stray inductance for differential-mode interference suppression
- Suitable for reflow soldering
- Design complies with EN 60938-9 (VDE 0565-8)
- RoHS-compliant

### OPTIONS:

- Tape & Reel is Standard (Qty:150pcs)
- Bulk packaging Available for Smaller Quantities

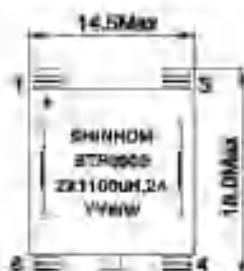
### COMMON APPLICATIONS:

- Suppressor of common-mode interference
- Connect electronic devices to lamps
- Compact switch-mode power supplies

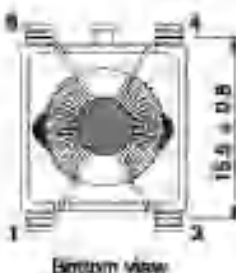
### ELECTRICAL CHARACTERISTICS:

Part Number	LT(Δ)(μH) @10KHz,0.1V ±50%/±30%	LT(Δ)(μH) @10KHz,0.1V (4-5 shot/rate)	DCR (winding) (mΩ) max.	Rated Current (A) max.	Ho-Pol Voc,25
STR0903-112Y	1.1	8	65	2.0	1500
STR0903-162Y	1.6	10	110	1.5	1500
STR0903-302Y	3.0	20	220	1.0	1500
STR0903-442Y	4.4	30	400	0.8	1500
STR0903-123Y	12	80	1100	0.5	1500
STR0903-223Y	22	120	1500	0.3	1500

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



#### Layout recommendation



Bottom view

- Operating voltage: 250Vac
- DC Max Determined when superimposed
- Inductance test: HF4264A 10KHz 0.1V
- RDC: CusTech 1880 Milliohm-meter
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Temperature rise 40°C Max
- Solder methods: Vapor Phase, infrared Reflow
- Resistance to soldering heat: 250°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Date

Note: All specifications subject to change without notice.



# COMMON MODE POWER LINE CHOKE STR1206 SERIES



## FEATURES:

- Approx. 0.7% stray inductance for differential-mode interference suppression
- Suitable for reflow soldering
- Design complies with EN 80638-2 (VDE 0565-2) and UL 1283
- RoHS-compatible

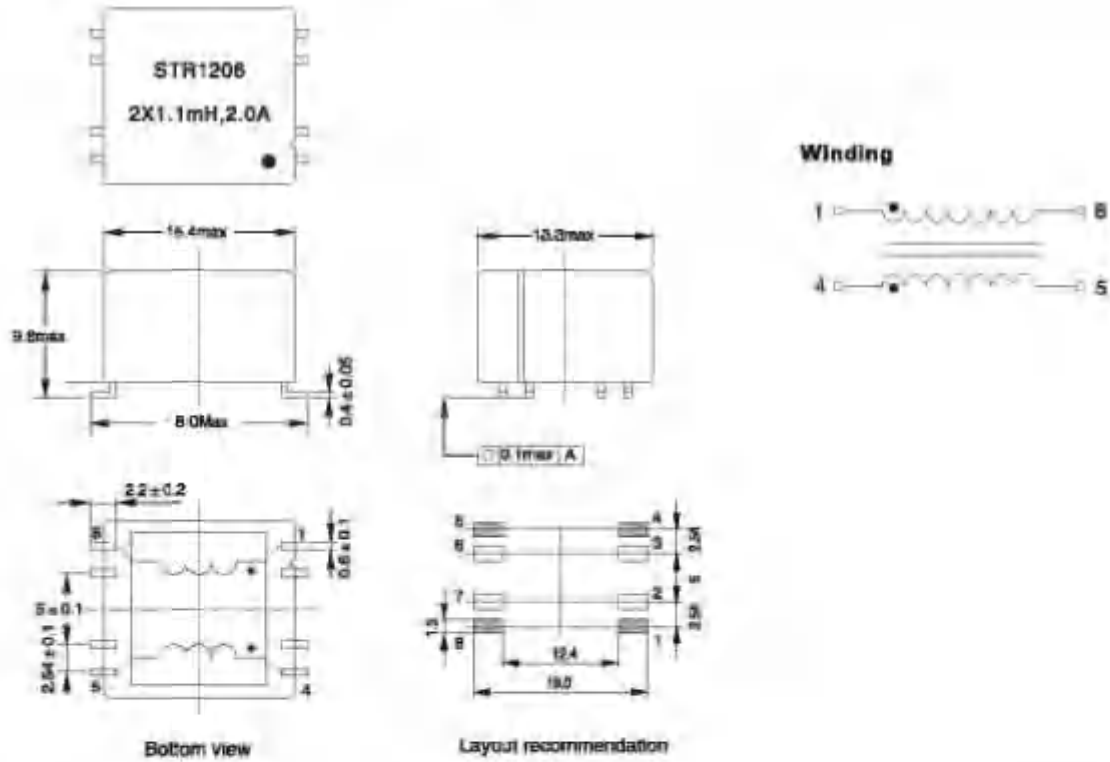
## APPLICATIONS:

- Suppression of common-mode interferences
- Compact switch-mode power applications
- Compact electronic ballasts in lamps

## ELECTRICAL CHARACTERISTICS:

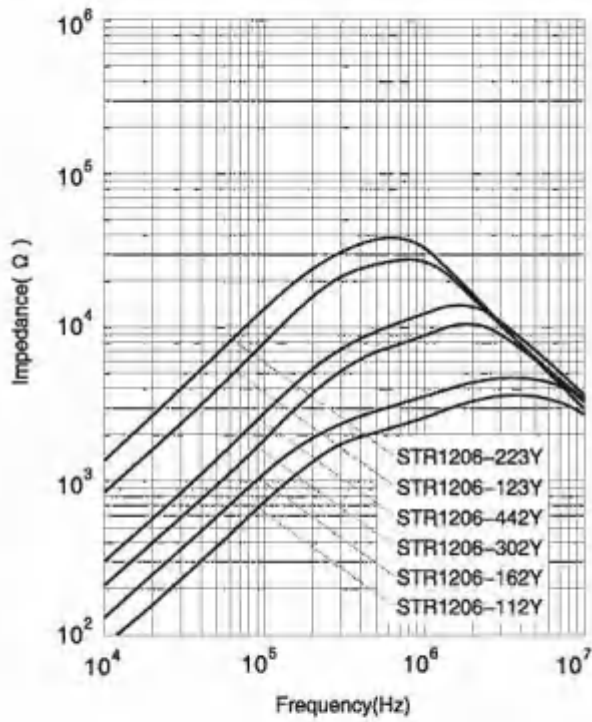
Part Number	L(mH) +50%/-30%	Lk(uH) Typ	Rated Current (A)	RDC(mΩ) Max
STR1206-112Y	1.1	6	2.0	65
STR1206-162Y	1.6	10	1.5	110
STR1206-302Y	3.0	20	1.0	220
STR1206-442Y	4.4	30	0.8	400
STR1206-123Y	12	80	0.3	1100
STR1206-223Y	22	130	0.3	1500

## PHYSICAL CHARACTERISTICS:

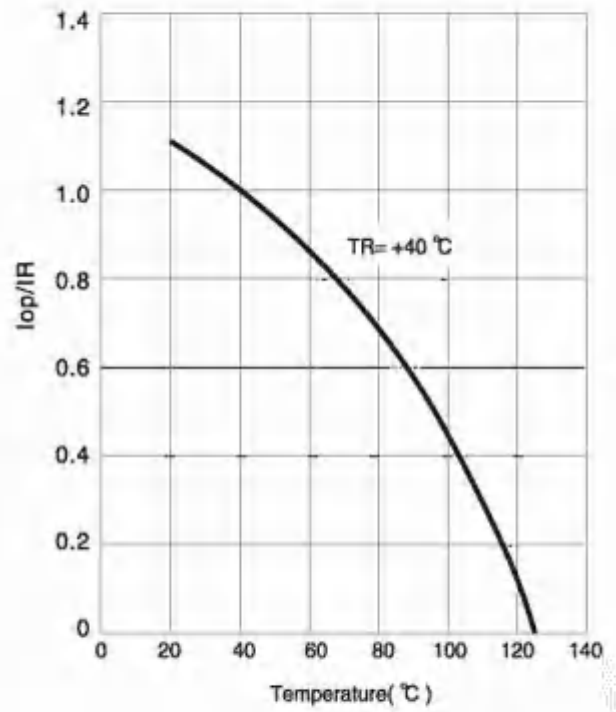


- Notes:
- Rated voltage.....250Vac
  - Frequency.....50/60Hz
  - Insulation test voltage.....1500V
  - Operating temperature.....-25 °C to +125 °C
  - Housing.....UL94 V-0

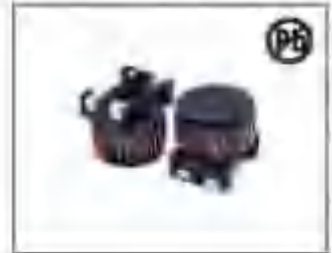
Impedance |Z| versus frequency F  
measured with windings in parallel at +20°C  
typical values



Current derating Iop/IR  
versus ambient temperature TA



# COMMON MODE CHOKE COIL STR804 SERIES



## FEATURES:

- Wire wound constructure common mode choke with best EMI suppression effect high impedance but very high rated current and low DCR.

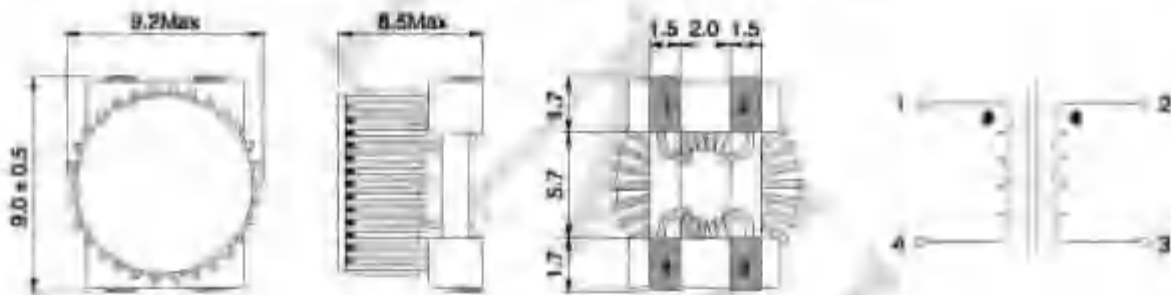
## APPLICATIONS :

- Preventive measure against common mode noise radiation emissions from power line or else.
- Best for high current circuit such as car, wireless charging and power device design.

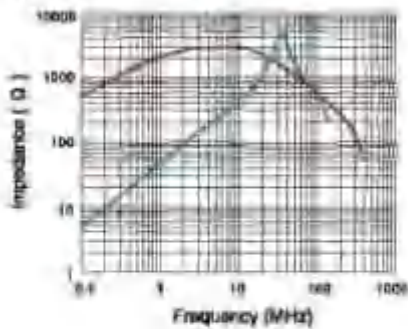
## ELECTRICAL CHARACTERISTICS@25°C

Part Number	Impedance (Ω)Freq N1=N2	Test frequency	DCR (mΩ)Max	IDC (A)Max
STR804-102	1000	100KHz/0.25V	100	2.5
STR804-132	1300	100KHz/0.25V	115	2.4
STR804-152	1500	100KHz/0.25V	130	2.3

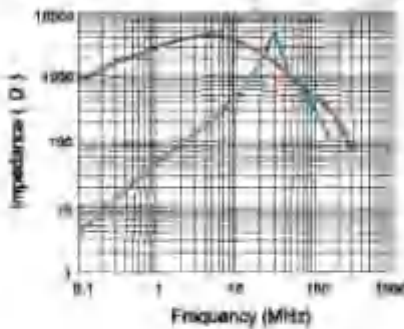
## PHYSICAL CHARACTERISTICS & WINDING



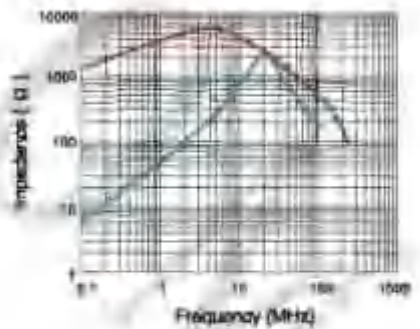
STR804-102



STR804-132



STR804-152



- Common mode
- - - Differential mode

## Note

- Z test with HP4191A or HP4365A.
- RDC:QuasiTact) 1880 Millimeter
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Resistance to soldering heat:260°C for 10 seconds

Note:All specifications subject to change without notice

# SMT COMMON MODE CHOKES

## STRF01 SERIES



### FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI performance
- Meets UL94V-0 flammability standard

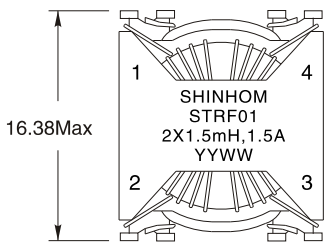
### APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

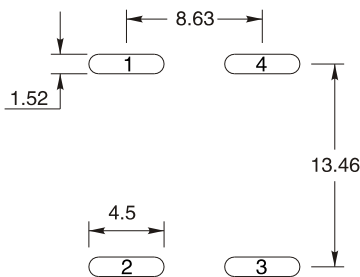
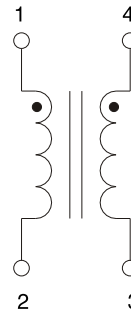
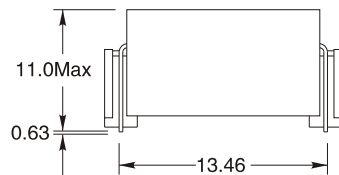
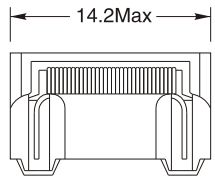
## ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH)Min 10KHz,0.1V	IDC (A)Max	DCR (mΩ)Max	Hi-Pot 1mA/2S/60Hz (Vac)
STRF01-651Y	650	3.6	50	1000
STRF01-801Y	800	1.5	60	1000
STRF01-152Y	1500	1.5	60	1000
STRF01-602Y	6000	1.0	450	1000
STRF01-153Y	15000	1.0	600	1000

## PHYSICAL CHARACTERISTICS & WINDING



Top view

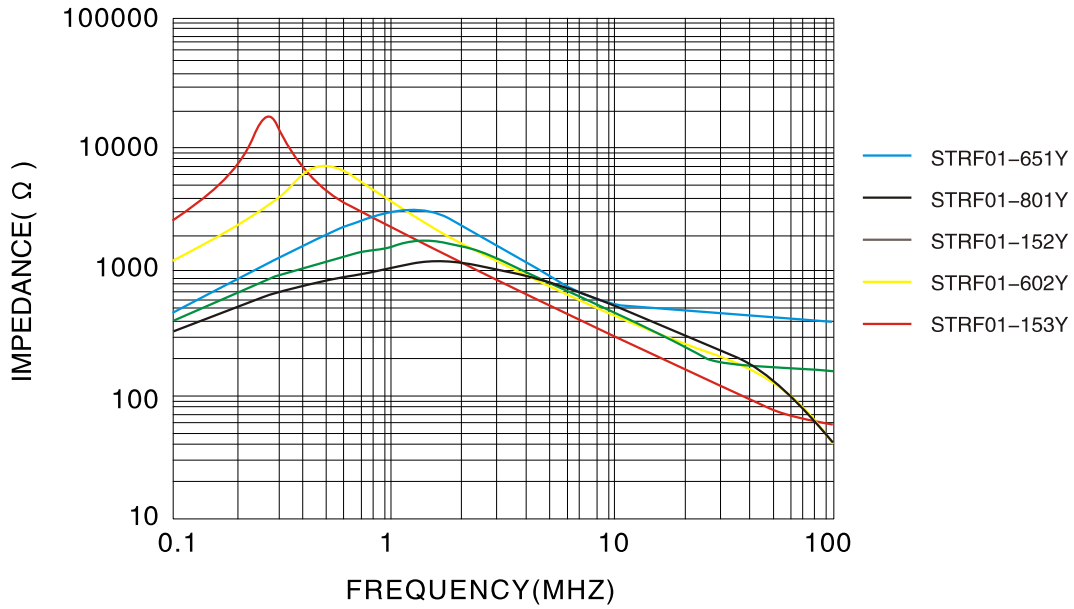


Pad layout

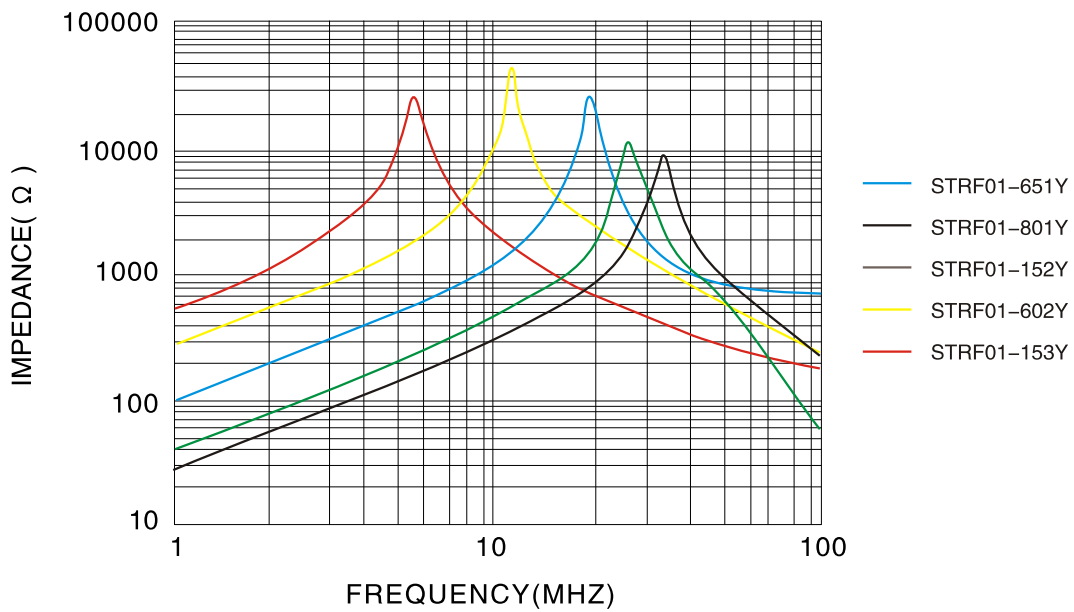
### NOTES:

- Temperature Rise .....40°C typical at IDC
- Operating Temperature .....-40°C to +125°C(Including self temperature rise)
- Storage Temperature .....-40°C to +125°C
- Soldering .....245°C, 5 seconds max
- Dielectric Strength .....1000 Vrms between windings

## IMPEDANCE COMMON MODE



## IMPEDANCE DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## STRF012 SERIES



### FEATURES:

- SMD Power line choke
- Compact size
- Toroidal core with sector winding
- High attenuation of common mode interferences in low and middle frequency range

### APPLICATIONS:

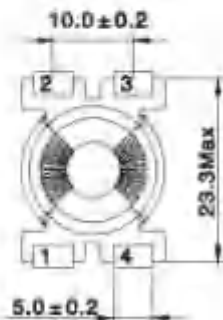
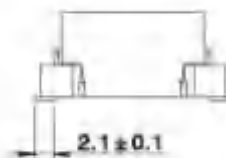
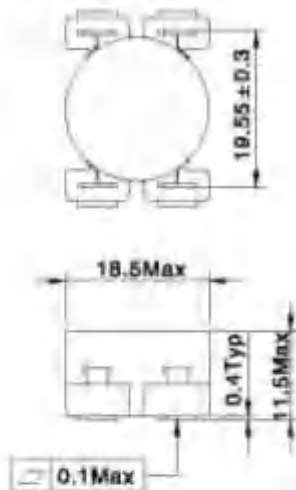
- Power electronics
- SMPS
- Mains filter

### ELECTRICAL CHARACTERISTICS:

Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
STRF012-701N	0.7	±30	4.0	0.03
STRF012-102N	1.0		2.0	0.06
STRF012-222N	2.2		2.0	0.10
STRF012-332N	3.3		1.5	0.15
STRF012-682N	6.8		1.0	0.30
STRF012-103N	10		0.7	0.55
STRF012-273N	27		0.4	1.20
STRF012-393N	39		0.4	1.70
STRF012-473N	47		0.3	2.60

### PHYSICAL CHARACTERISTICS:

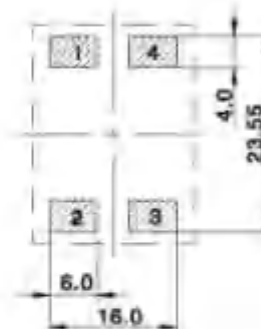
#### Dimensions 1



#### Winding



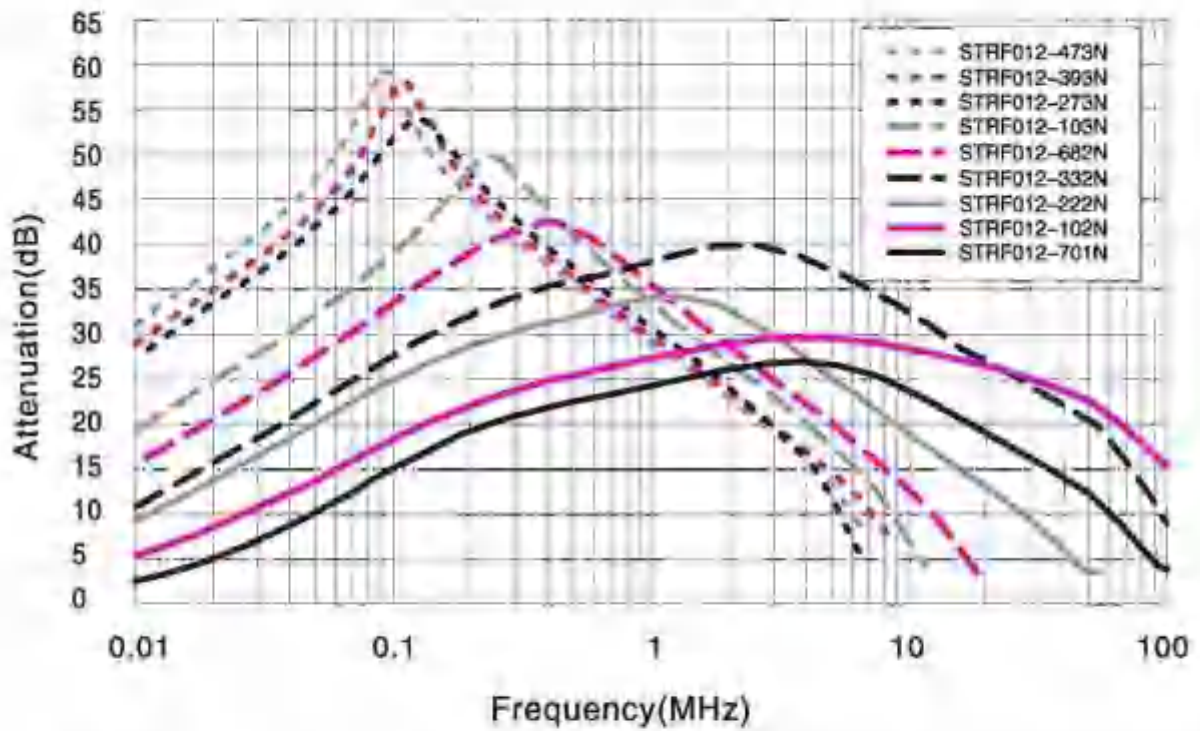
#### Pad layout



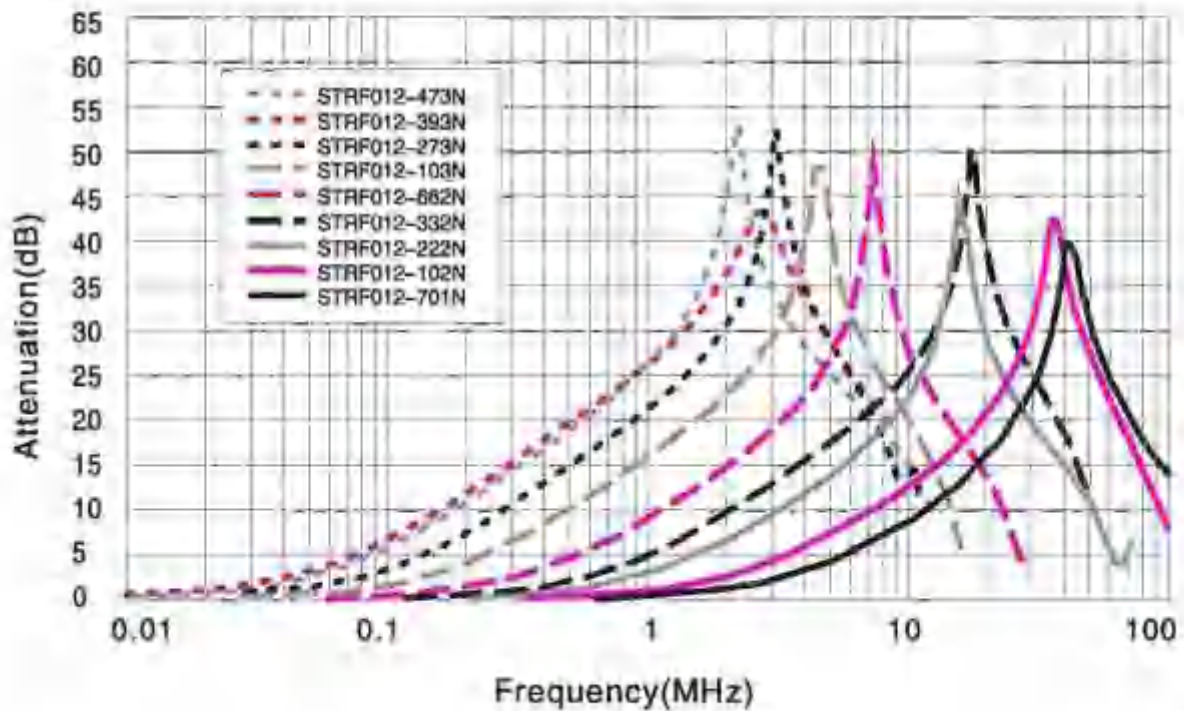
#### NOTES:

- Temperature Rise .....40°C typical at IDC
- Operating Temperature .....-40°C to +125°C (including self temperature rise)
- Storage Temperature .....-40°C to +125°C
- Soldering .....245°C, 5 seconds max
- Dielectric Strength .....1000 Vrms between windings

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# SMT COMMON MODE CHOKES

## STRF04 SERIES



### FEATURES:

- Common mode chokes for AC power lines
- High Impedance to minimize common mode noise
- Excellent EMI performance
- Meets UL94V-0 flammability standard

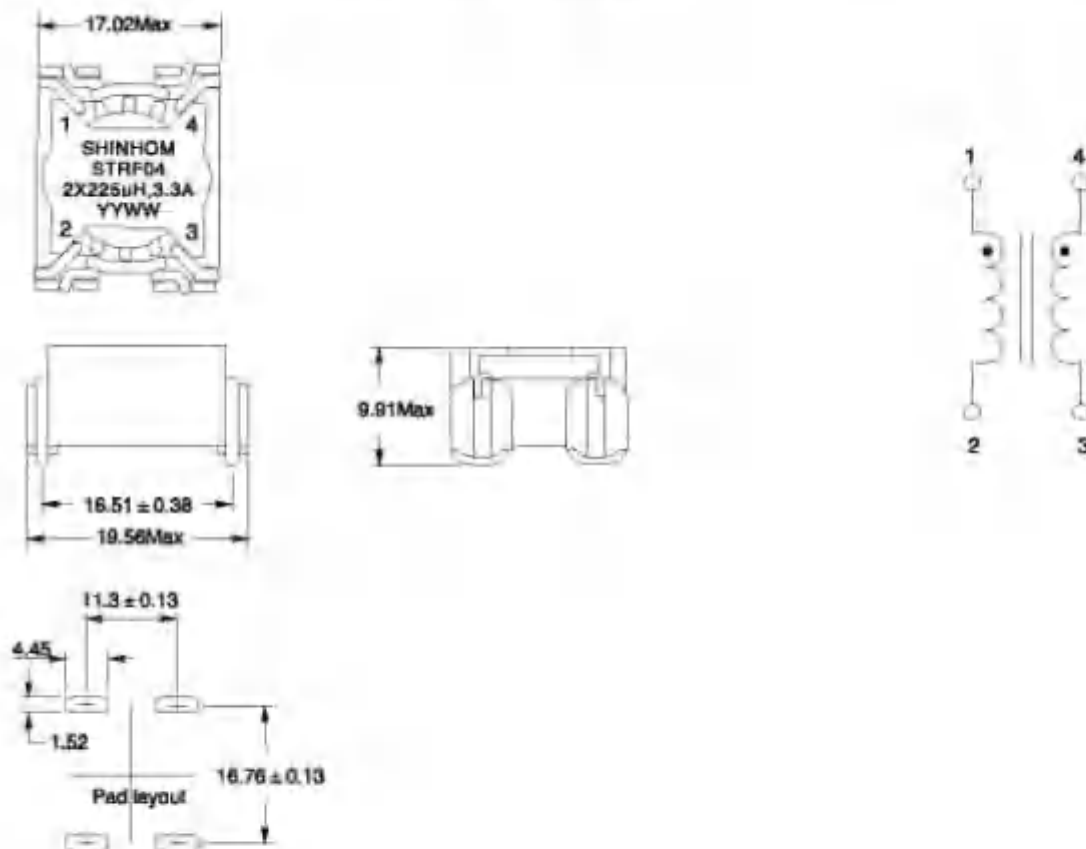
### APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

### ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) ( $\mu$ H) $\pm$ 35% 10KHz, 0.1V	IDC (A)Max	DCR (m $\Omega$ )Max	Hi-Pot 1mA/2S/60Hz (Vac)
STRF04-221Y	225	3.3	60	1000
STRF04-591Y	590	5.8	21	1000
STRF04-771Y	770	4.7	40	1000
STRF04-132Y	1320	3.3	80	1000
STRF04-152Y	1470	2.8	80	1000

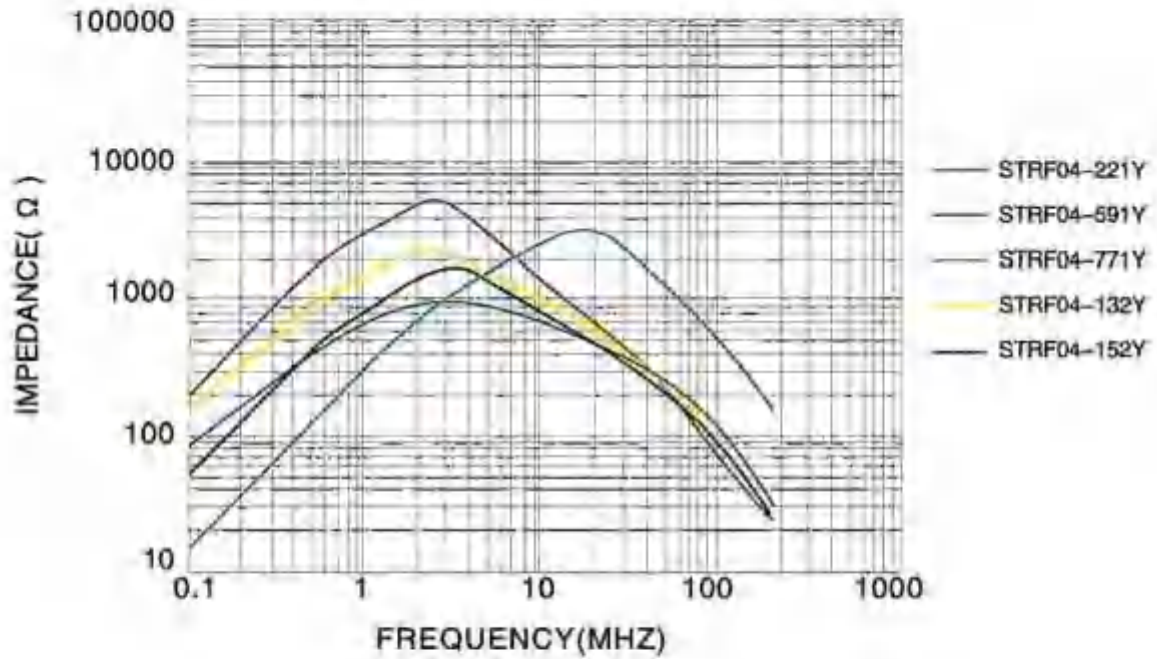
### PHYSICAL CHARACTERISTICS & WINDING



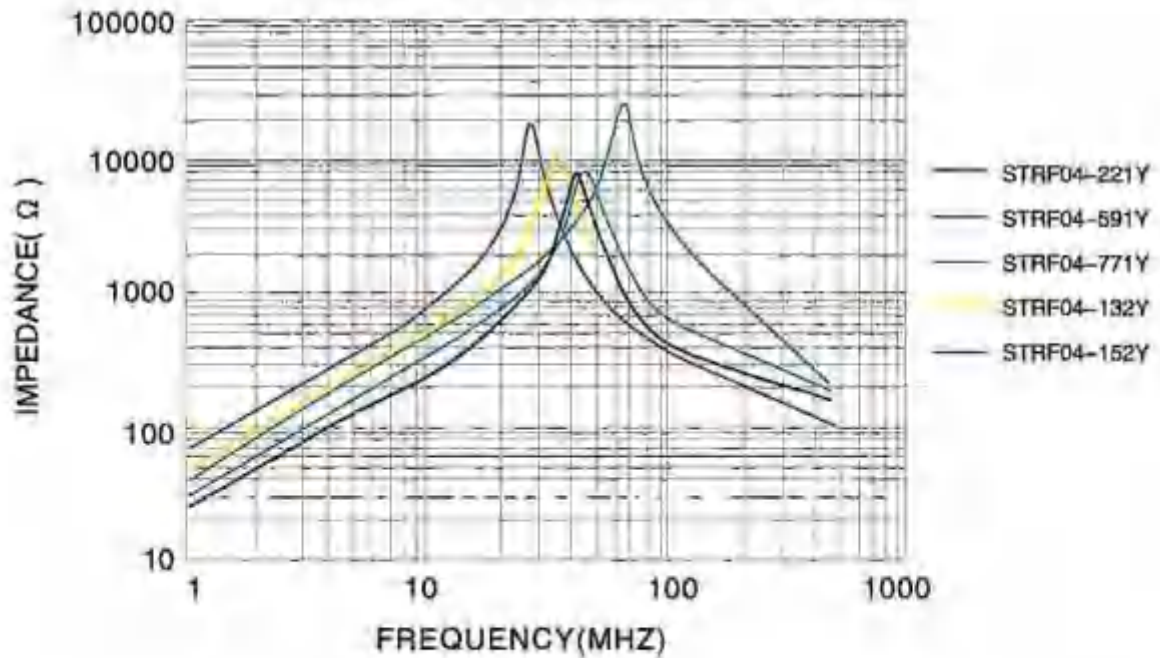
### NOTES:

- Temperature Rise ..... 40°C typical at IDC
- Operating Temperature ..... -40°C to +125°C (including self temperature rise)
- Storage Temperature ..... -40°C to +125°C
- Soldering ..... 245°C, 5 seconds max
- Dielectric Strength ..... 1000 Vrms between windings

### IMPEDANCE COMMON MODE



### IMPEDANCE DIFFERENTIAL MODE



# SMT COMMON MODE CHOKES

## STRF06 SERIES



### FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI performance
- Meets UL94V-0 flammability standard

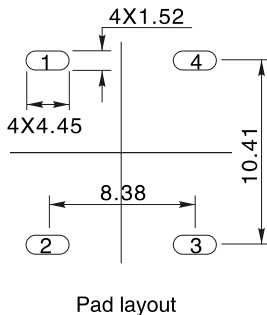
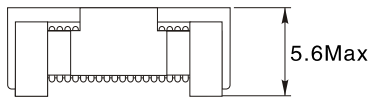
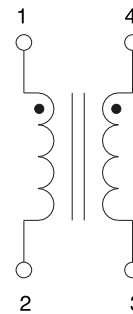
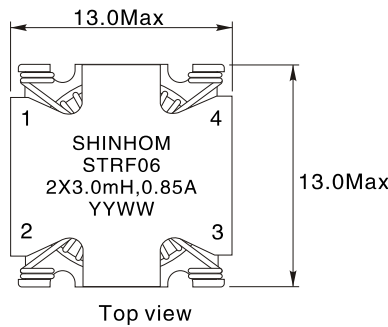
### APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

## ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (uH) ± 35% 100KHz,0.1V	IDC (A)Max	DCR (mΩ)Max	Hi-Pot 1mA/2S/60Hz (Vac)
STRF06-881Y	880	1.63	110	1000
STRF06-112Y	1170	1.22	200	1000
STRF06-302Y	3000	0.85	280	1000
STRF06-392Y	3900	0.85	350	1000
STRF06-682Y	6800	0.30	700	1000

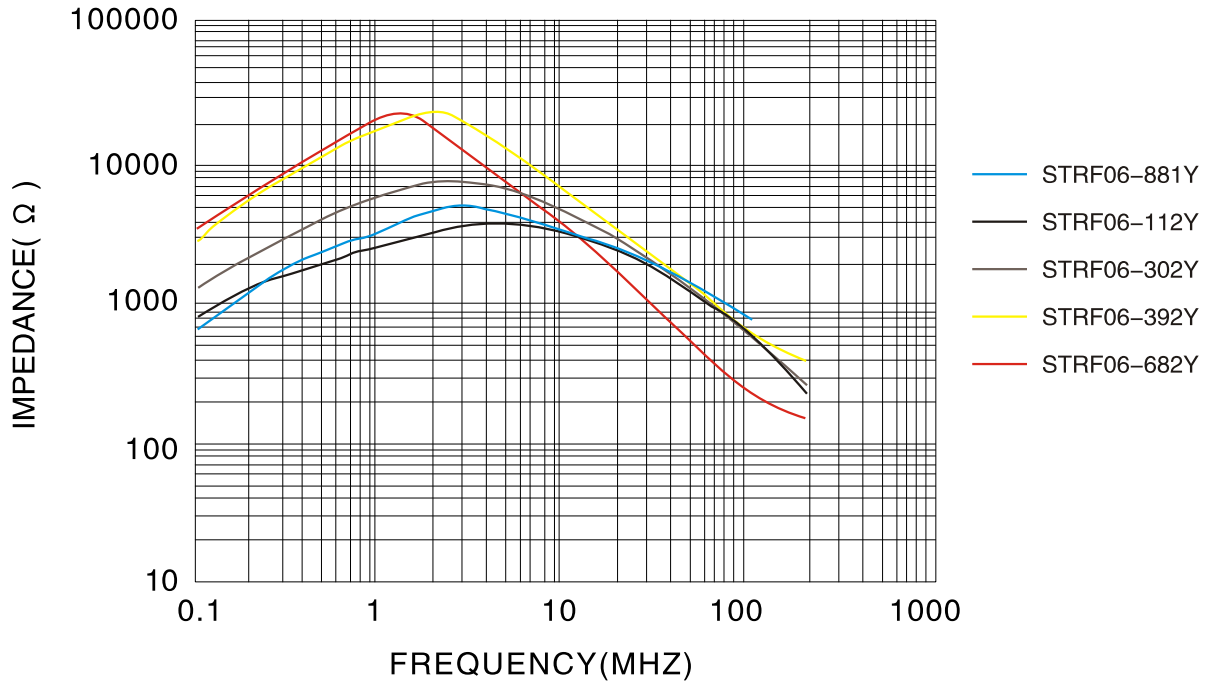
## PHYSICAL CHARACTERISTICS & WINDING



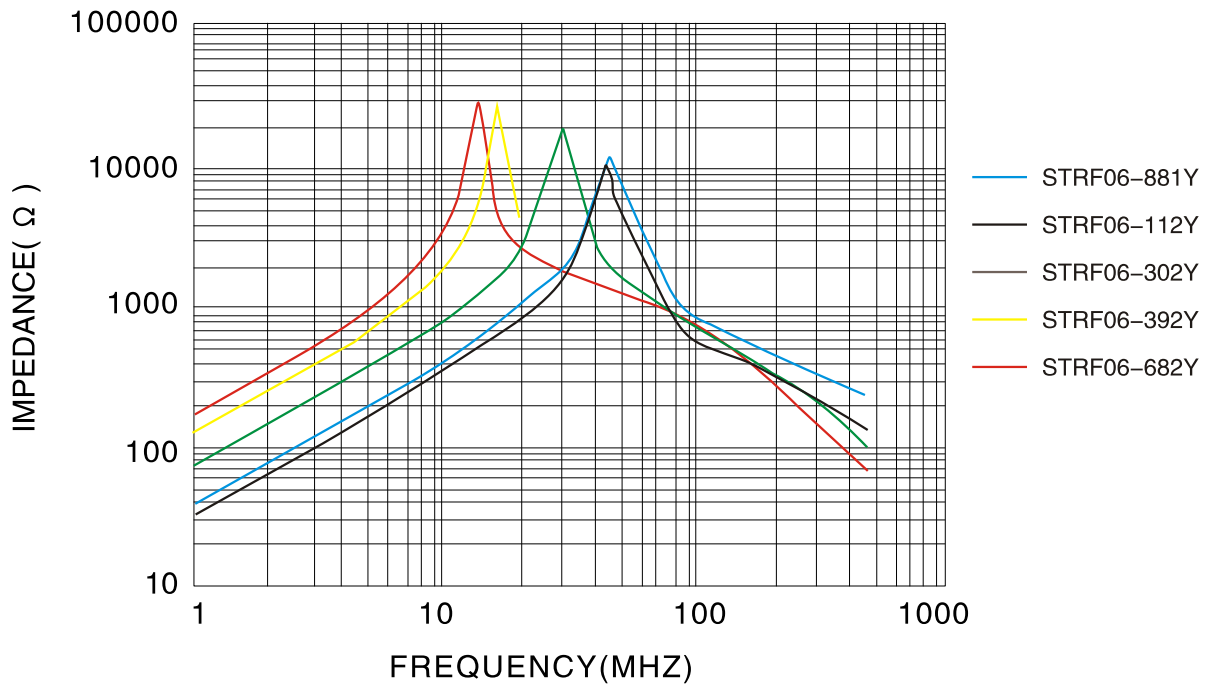
### NOTES:

- Temperature Rise .....40°C typical at IDC
- Operating Temperature .....-40°C to +125°C(Including self temperature rise)
- Storage Temperature .....-40°C to +125°C
- Soldering .....245°C, 5 seconds max
- Dielectric Strength .....1000 Vrms between windings

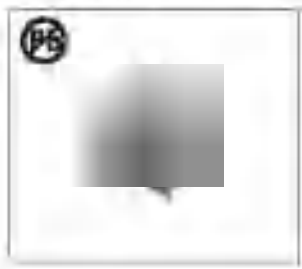
## IMPEDANCE COMMON MODE



## IMPEDANCE DIFFERENTIAL MODE



# COMMON MODE CHOKE STRF07 SERIES



## FEATURES:

- Common mode choke for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI performance
- Meets UL94V-0 flammability standard

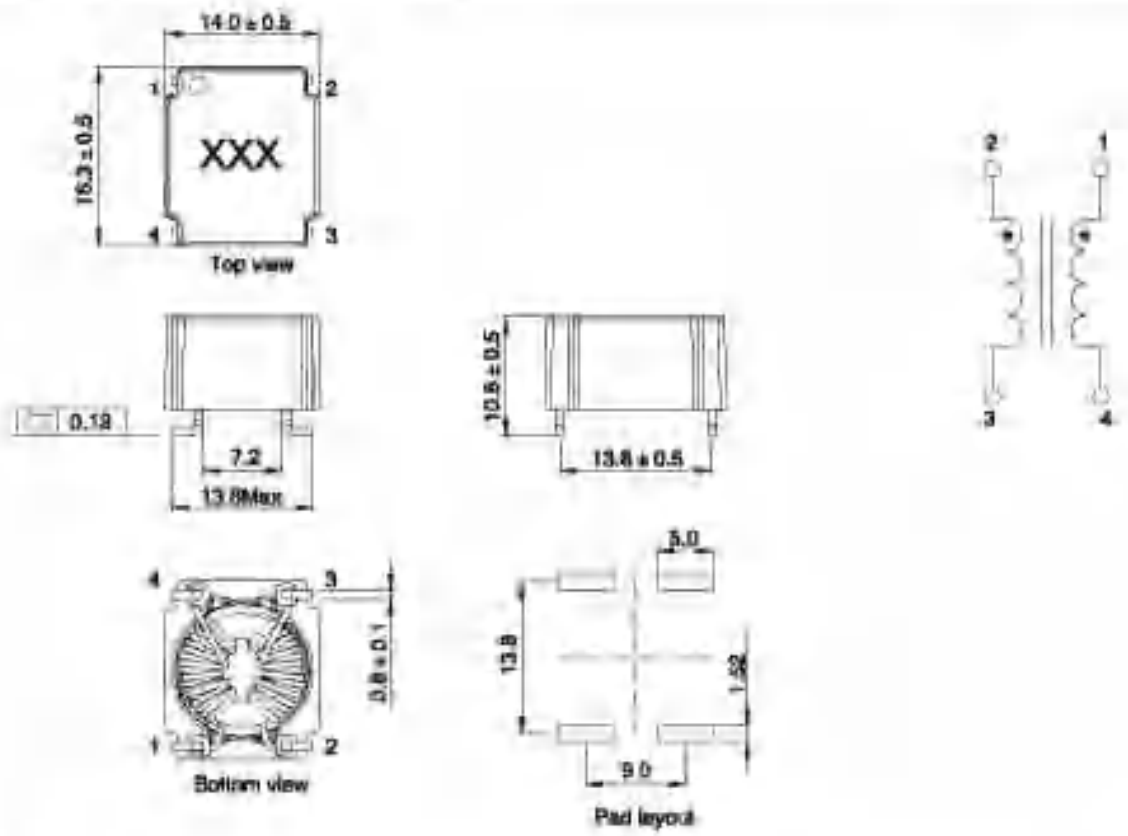
## APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

## ELECTRICAL CHARACTERISTICS:

Part Number	L(2A) (mH) Min 10MHz, 0.1V	DCR (mΩ)Max	DC (A)Max	Hi-Pot (Vdc) 50Hz, 1mA, 1S
BTRF07-651Y	0.65	20	3	1000
BTRF07-801Y	0.8	33	2.4	1000
BTRF07-152Y	1.5	70	1.6	1000
BTRF07-802Y	8.0	200	0.8	1000
BTRF07-103Y	10.0	500	0.5	1000

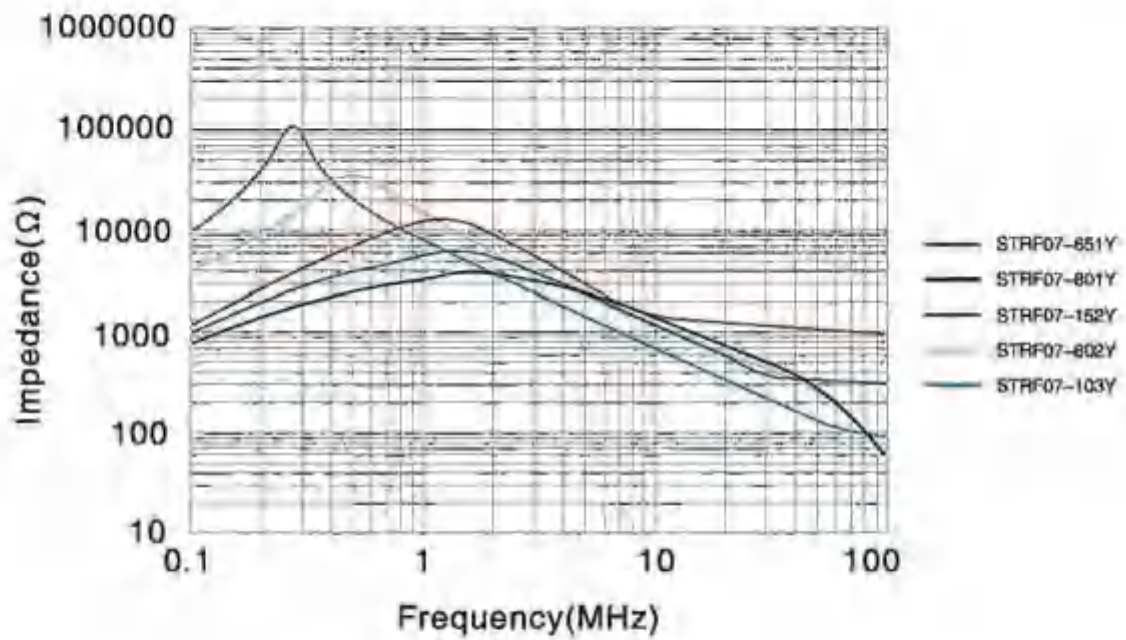
## PHYSICAL CHARACTERISTICS



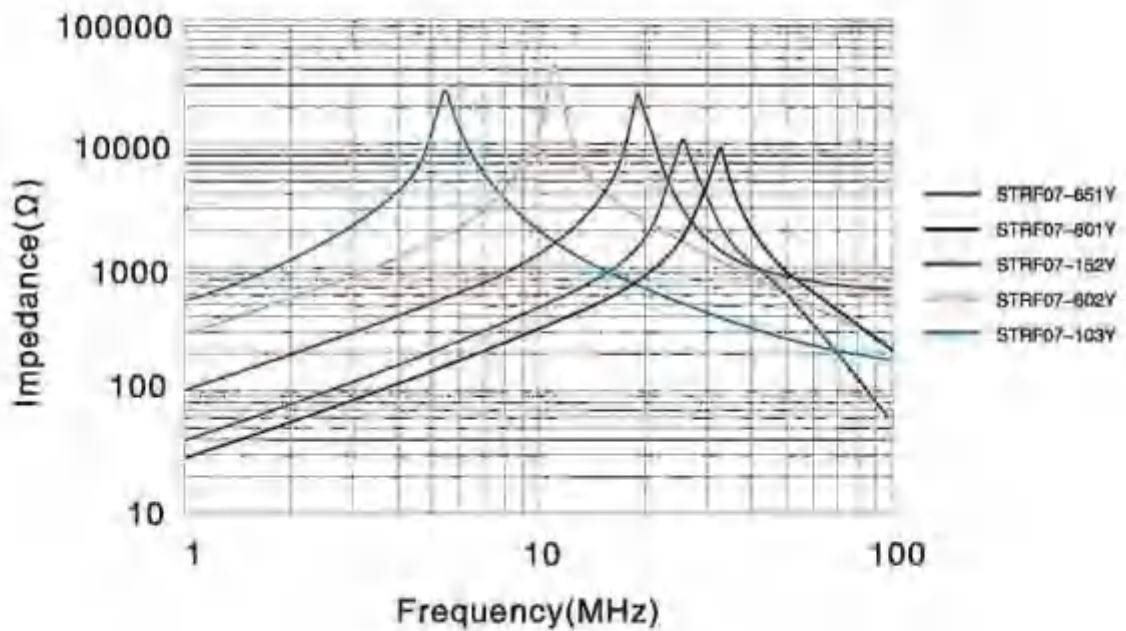
### NOTES:

- Temperature Rise ..... 40°C typical at IDC
- Operating Temperature ..... -40°C to +125°C (including self temperature rise)
- Storage Temperature ..... -40°C to +125°C
- Soldering ..... 245°C, 5 seconds max
- Dielectric Strength ..... 1000 Vrms between windings

### IMPEDANCE COMMON MODE



### IMPEDANCE DIFFERENTIAL MODE



# SMT COMMON MODE CHOKES

## STRF16 SERIES



### FEATURES:

- Common mode chokes for AC power lines
- High Impedance to minimize common mode noise
- Excellent EMI performance
- Meets UL94V-0 flammability standard

### APPLICATIONS:

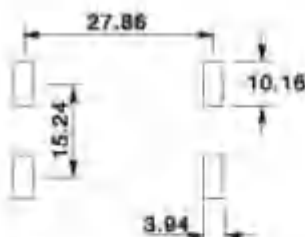
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

### ELECTRICAL CHARACTERISTICS:

Part Number	L(DC) (uH) ± 35% 100KHz, 0.1V	IDC (A)Max	DCR (mΩ)Max	Hi-Pot 1mA/2S/60Hz (Vac)
STRF016□-131Y	135	26	3.5	1000
STRF016□-221Y	225	20	6.0	1000
STRF016□-471Y	470	14	8.0	1000
STRF016□-631Y	630	11.6	10	1000
STRF016□-821Y	820	7.0	15	1000

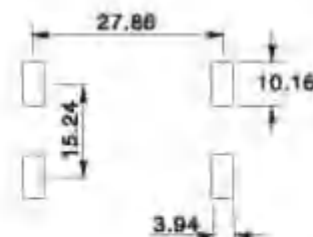
### PHYSICAL CHARACTERISTICS & WINDING

STRF016A



Suggested pad layout

STRF016B



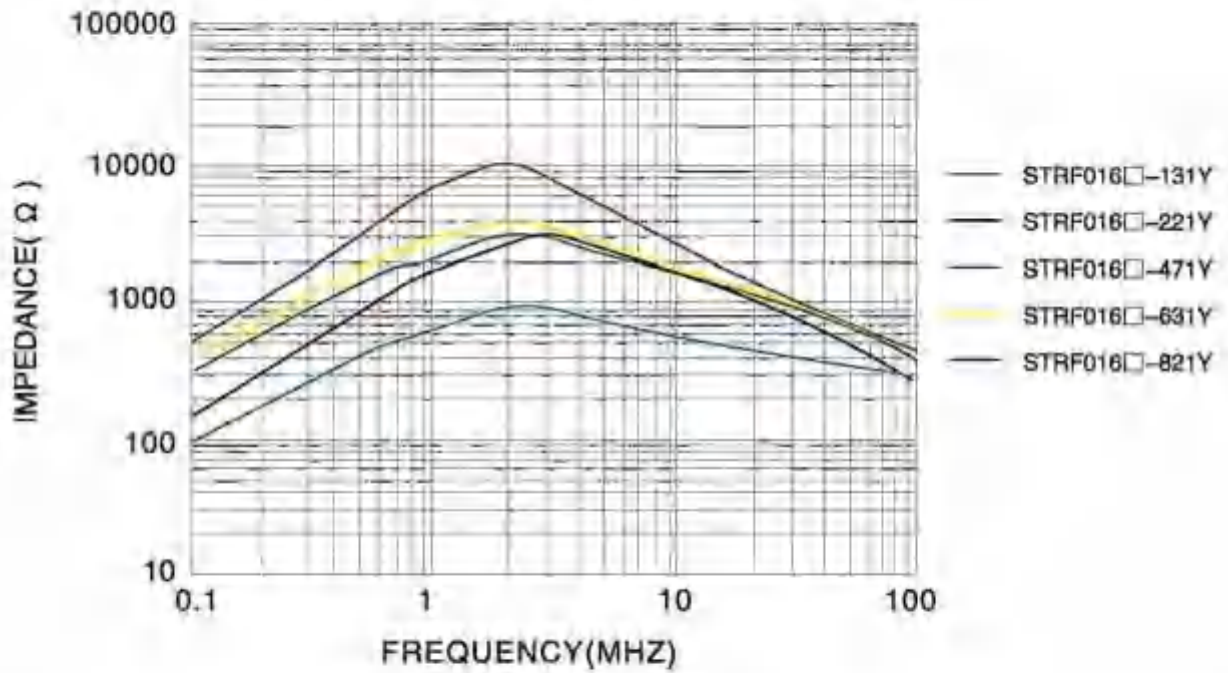
Suggested pad layout



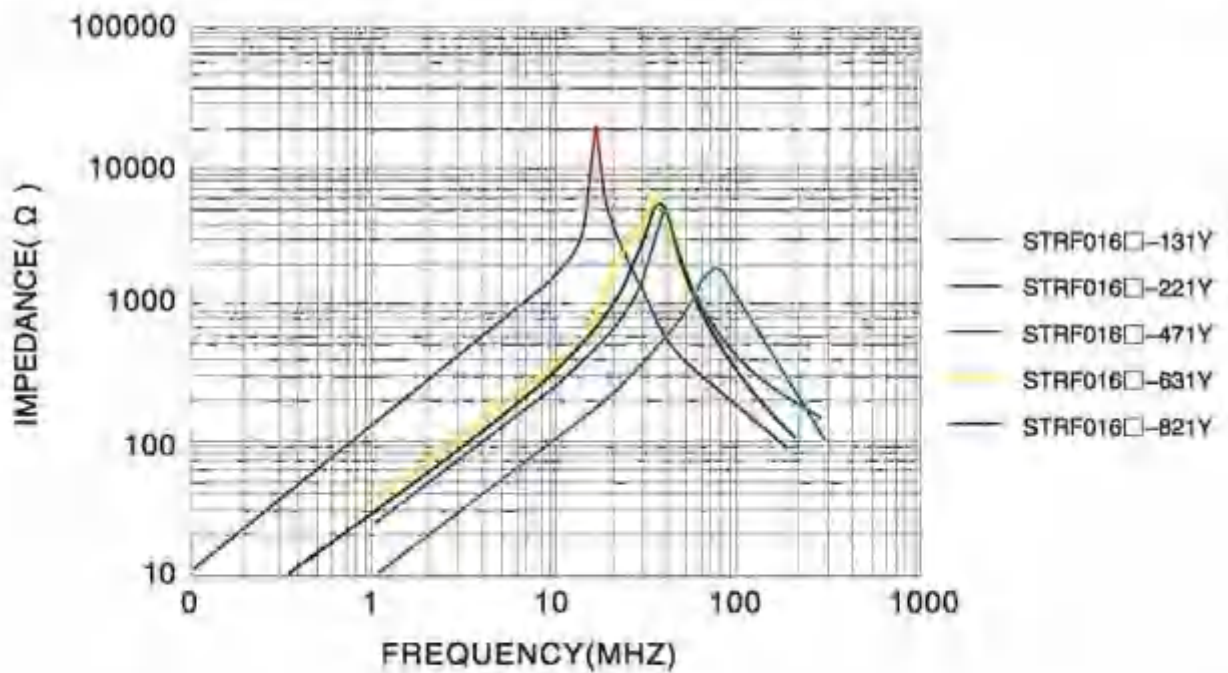
### NOTES:

- Temperature Rise ..... 40°C typical at IDC
- Operating Temperature ..... -40°C to +125°C (including self temperature rise)
- Storage Temperature ..... -40°C to +125°C
- Soldering ..... 245°C, 5 seconds max
- Dielectric Strength ..... 1000 Vrms between windings

### IMPEDANCE COMMON MODE



### IMPEDANCE DIFFERENTIAL MODE



# WIRE-WOUND SMT POWER COMMON-MODE CHOKES

## STRF2210 SERIES



### FEATURES:

- Small size with high current
- Stable performance under load bias and high reliability
- High suppression of asymmetric interferences at both low and high frequency
- SMT Type with less height

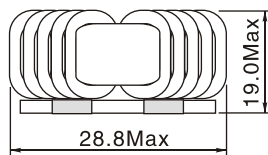
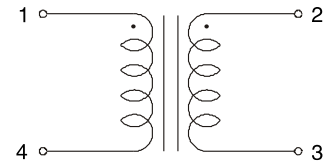
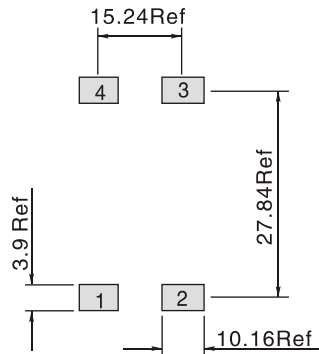
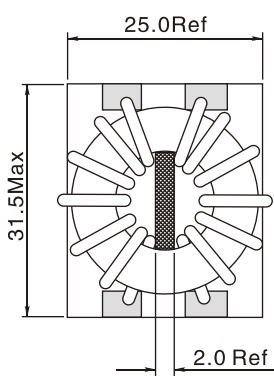
### APPLICATIONS:

- Interferences suppression of common mode noise
- Power line filter
- Switch-mode power supplies

## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (uH) +35%/-40%	Turns ratio 20KHz,1V N1:N2	DCR (mΩ) Max	Rated Current (A) Max	Hi-Pot 60Hz,10mA,2S (V)
STRF2210-680Y	68	1:1	0.56	50	1500
STRF2210-181Y	180	1:1	1.35	32	1500
STRF2210-321Y	320	1:1	2.5	28	1500
STRF2210-621Y	620	1:1	3.5	20	1500
STRF2210-801Y	800	1:1	5.3	16	1500
STRF2210-132Y	1300	1:1	10	11	1500
STRF2210-182Y	1800	1:1	14	9	1500

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



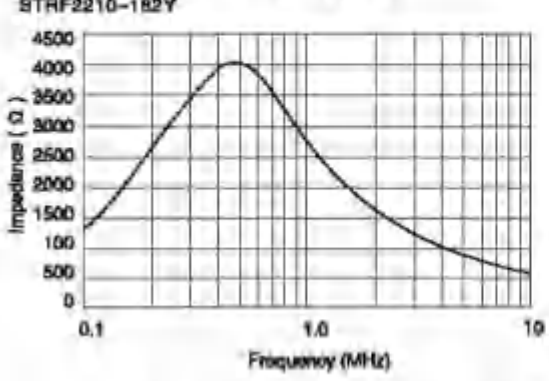
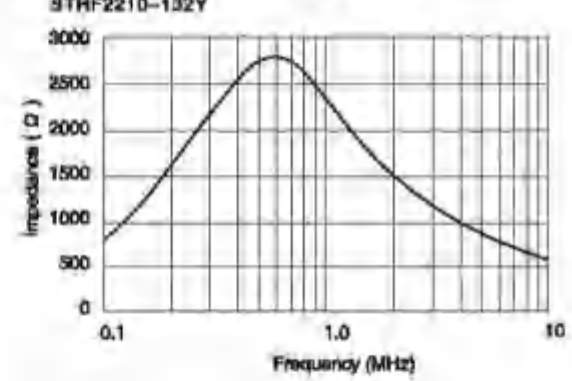
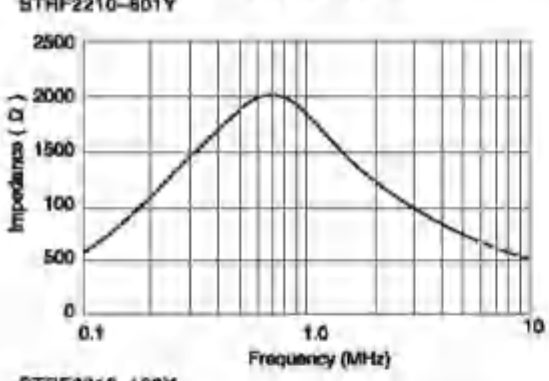
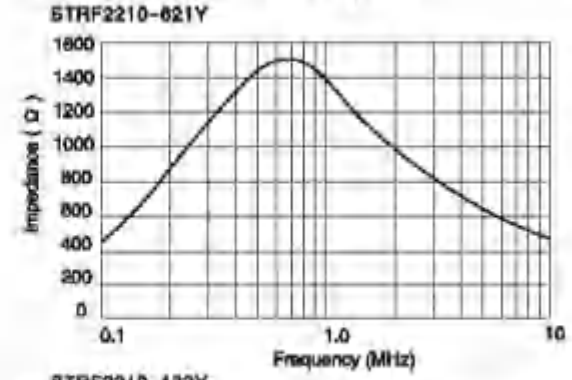
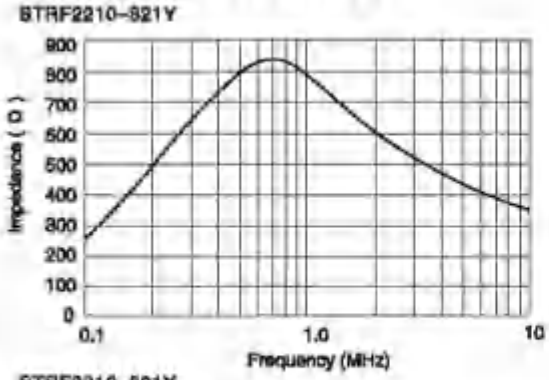
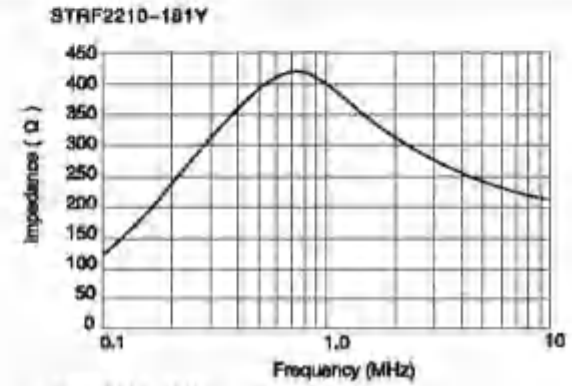
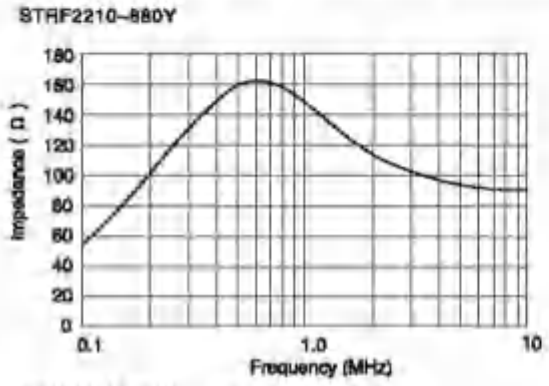
- Inductance Testing: 100KHz,0.1V
- Operating temperature: -40°C to +125°C(Including self temperature rise)
- Storage Temperature: -40°C to +125°C
- Resistance to soldering heat: 260°C for 10 seconds

Note:All specifications subject to change without notice.

# WIRE-WOUND SMT POWER COMMON-MODE CHOKES STRF2210 SERIES



## IMPEDANCE vs FREQUENCY:



# COMMON MODE POWER LINE CHOKE

## TRF1005VT SEIRES



### FEATURES:

- Very high permeability nanocrystalline core material
- Improved isolation through plastic case and winding spacer
- High and stable inductance values at high temperatures
- High rated currents
- Broadband suppression
- Small size

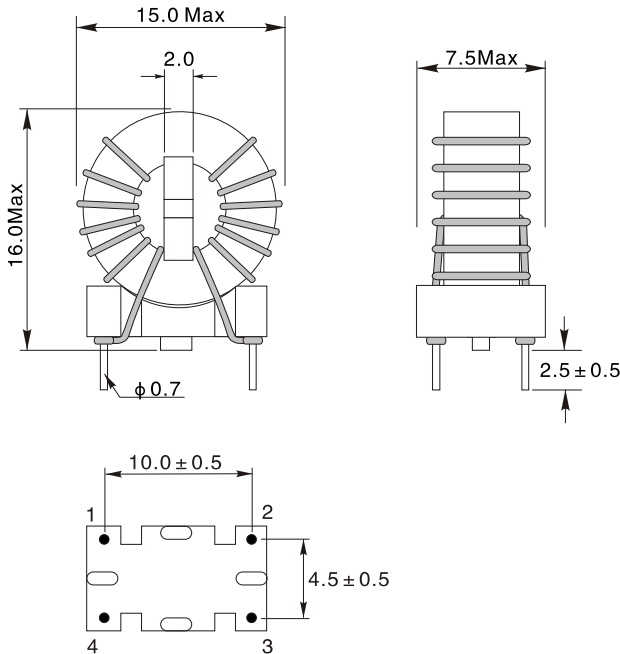
### APPLICATIONS:

- Power electronics
- Power line in- and output filter
- Suppression for common mode noise
- Radio interference suppression in motors

### ELECTRICAL CHARACTERISTICS:

Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF1005VT-401Y	0.4	-30 to +50	4.5	22
TRF1005VT-501Y	0.5		3.5	33
TRF1005VT-102Y	1.0		2.5	55
TRF1005VT-162Y	1.6		2.0	90
TRF1005VT-502Y	5.0		1.3	200
TRF1005VT-802Y	8.0		1.0	330
TRF1005VT-113Y	11.0		0.9	430

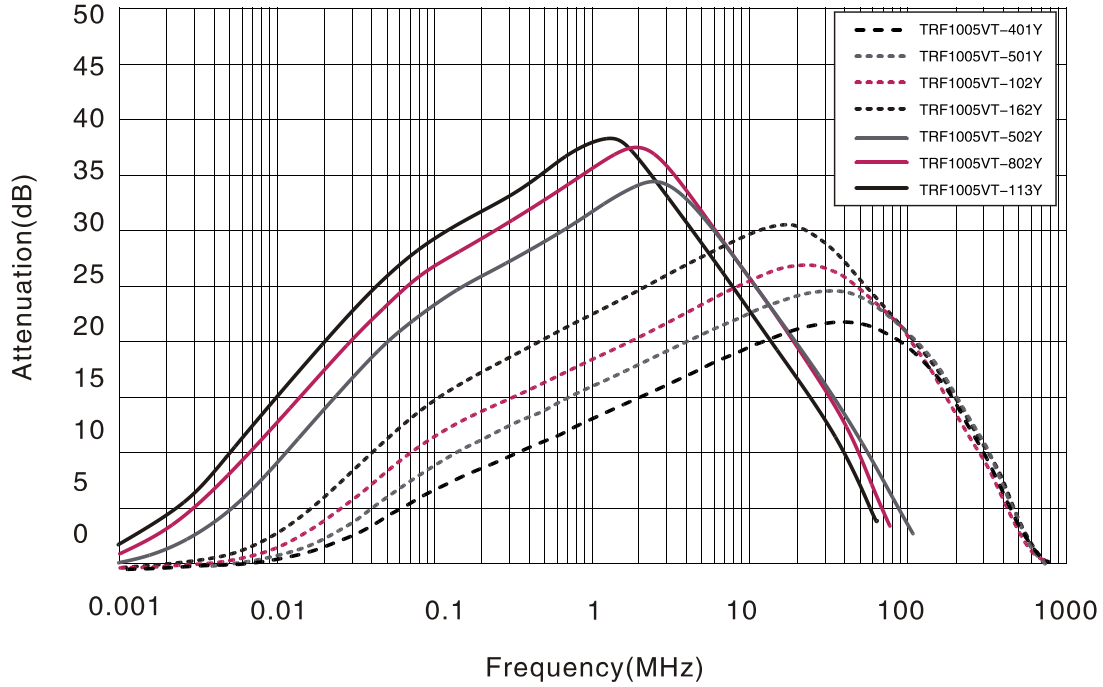
### PHYSICAL CHARACTERISTICS: WINDING:



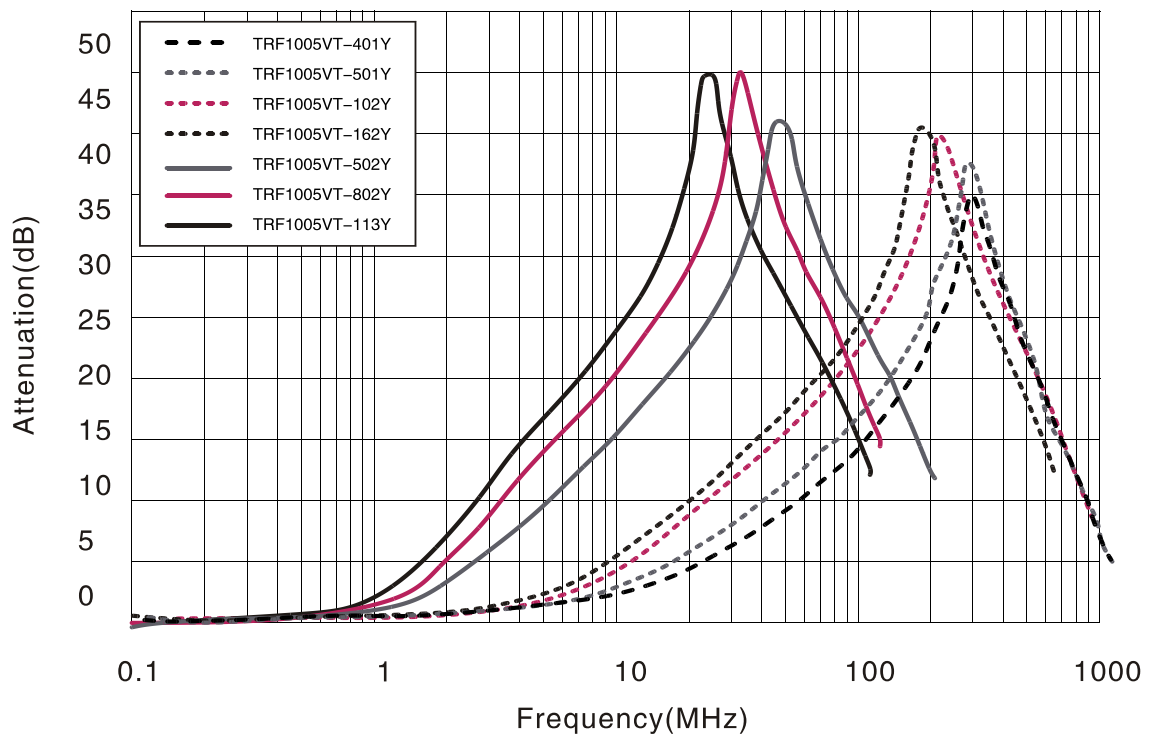
Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage..... 1500V
- Operating temperature.....-40 °C to +125 °C
- Housing..... UL94 V-0

## INSERTION LOSS COMMON MODE



## INSERTION LOSS DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE TRF101 SERIES



## FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core choke with sector winding
- High interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

## APPLICATIONS:

- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

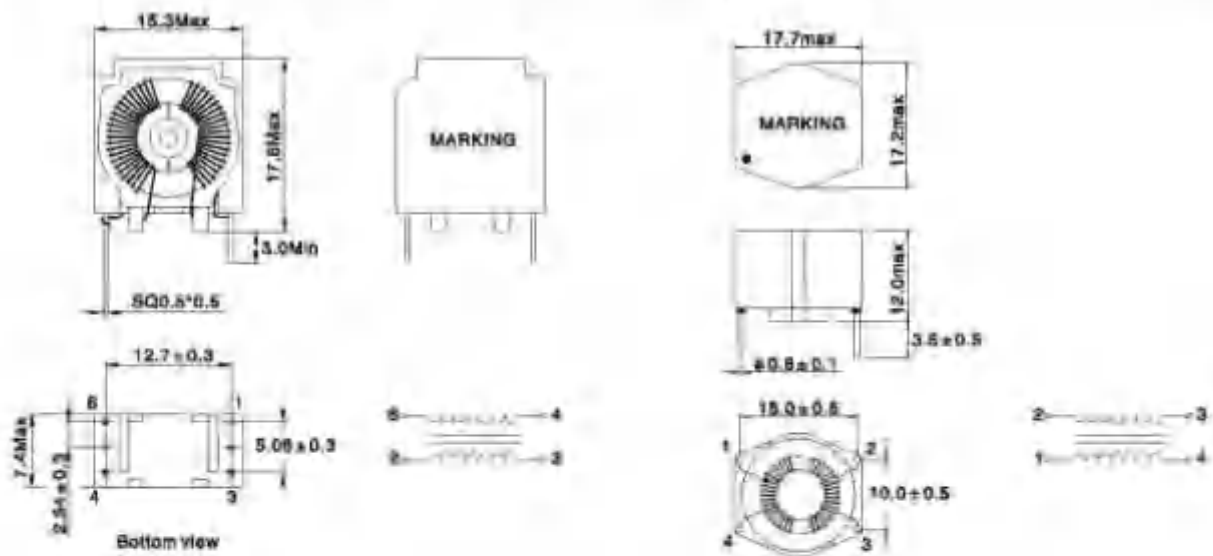
## ELECTRICAL CHARACTERISTICS:

Part Number	L (mH)+50%/-30% 10KHz,0.1V	Leakage inductance (uH)Typ	Rated Current (A)	RDC (mΩ)max.
TRF101H/V-473Y	47	600	0.25	2400
TRF101H/V-303Y	30	500	0.3	2200
TRF101H/V-223Y	22	400	0.35	1900
TRF101H/V-153Y	15	250	0.4	1350
TRF101H/V-103Y	10	170	0.5	1000
TRF101H/V-682Y	6.8	120	0.6	630
TRF101H/V-472Y	4.7	75	0.7	440
TRF101H/V-472YC	4.7	55	0.9	250

## PHYSICAL CHARACTERISTICS:

V=Vertical

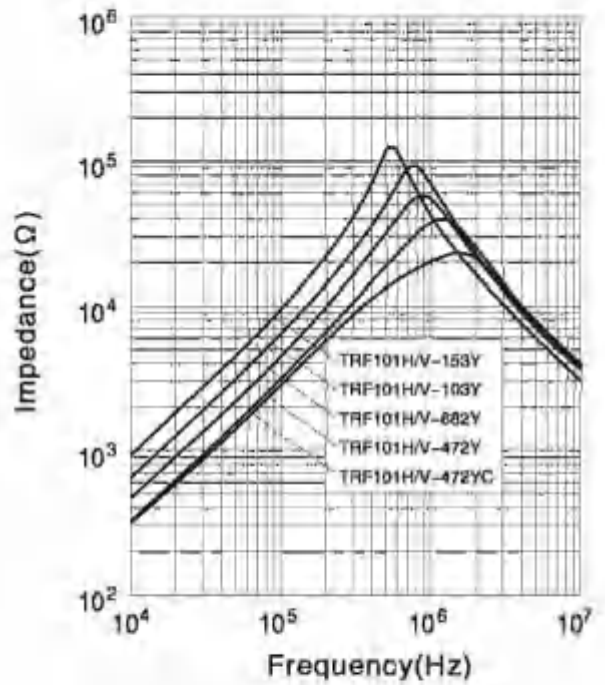
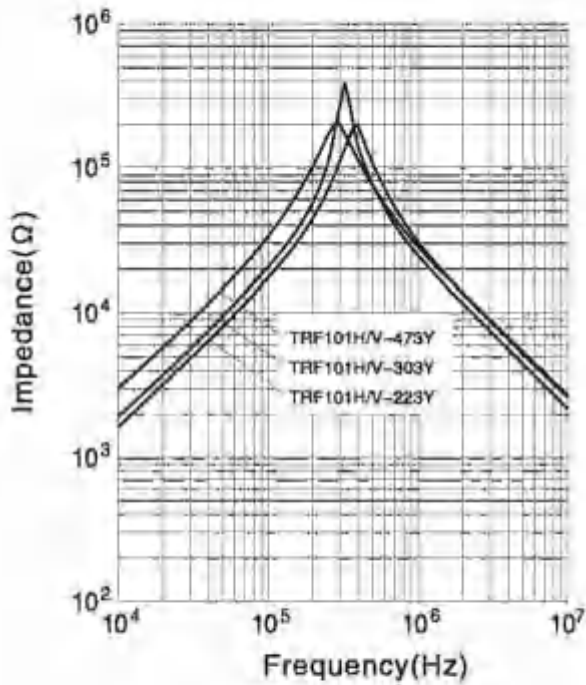
H=Horizontal



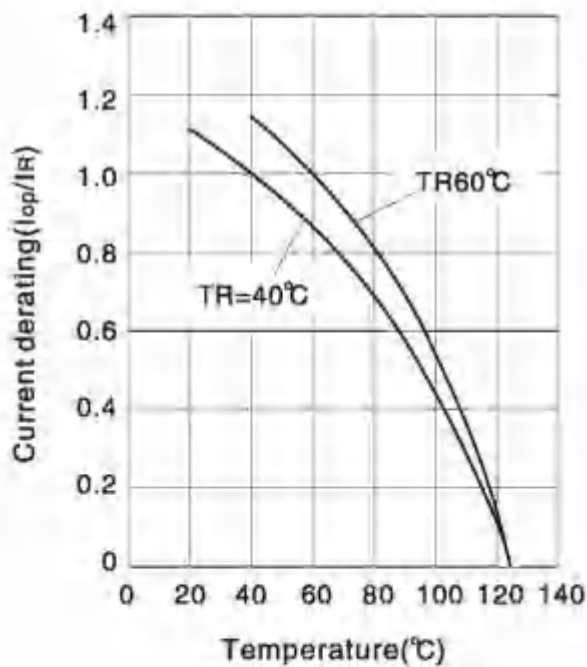
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-25 °C to +105 °C (Including self temperature rise)
- Housing.....UL94 V-0

Impedance  $|Z|$  versus frequency  $F$   
 measured with windings in parallel at +20 °C typical values



Current derating Versus temperature



# THROUGH-HOLE CURRENT-COMPENSATED CHOKES

## TRF110 SERIES



### FEATURES:

- 0.2A to 2A ratings
- 1.1mH to 66mH dual chokes
- Excellent Mechanical Strength
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

### COMMON APPLICATIONS:

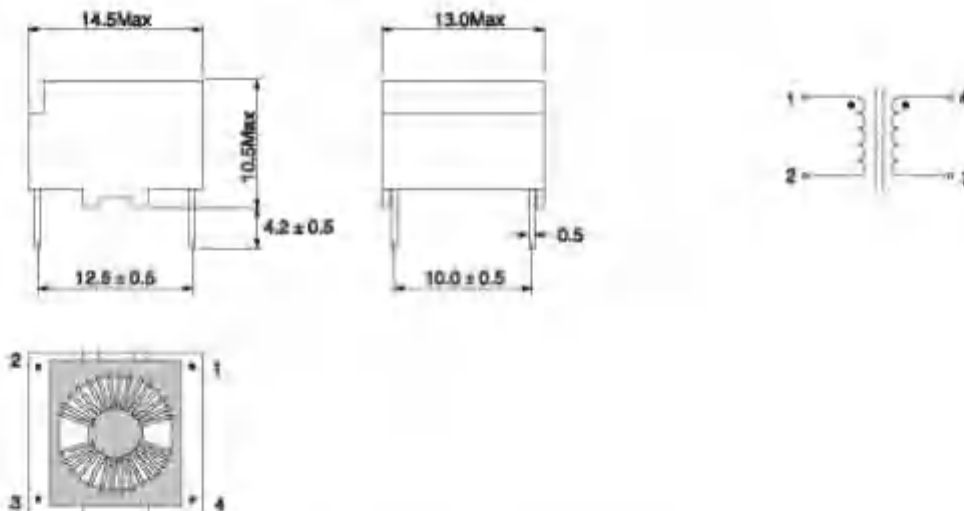
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDP Televisions
- Computer Peripheral Equipment

### ELECTRICAL CHARACTERISTICS@25°C

Part Number	Inductance (mH) Min	DCR (mΩ) Max	IDC (A) Max
TRF110-112Y	1.1	66	2.0
TRF110-162Y	1.6	110	1.5
TRF110-302Y	3.0	220	1.0
TRF110-442Y	4.4	400	0.8
TRF110-123Y	12.0	1100	0.3
TRF110-223Y	22.0	1600	0.3

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions(mm)



- Inductance Testing: 1.0KHz 0.1V HP4284A
- Test conditions of Electrical Properties: +25°C, 33% RH if not specified differently
- Temperature Rise 55°C Max
- It is recommended that the temperature of the component does not exceed +125°C under worst case conditions
- Operating temperature: -40°C to +125°C
- Storage Temperature: -20°C to +60°C
- Acceptable customers design custom

# COMMON MODE POWER LINE CHOKE

## TRF112A SERIES



### FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core choke with sector winding
- High interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

### APPLICATIONS:

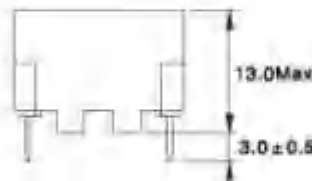
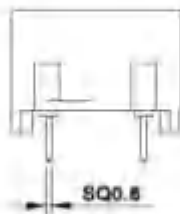
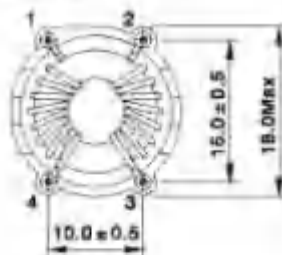
- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

### ELECTRICAL CHARACTERISTICS:

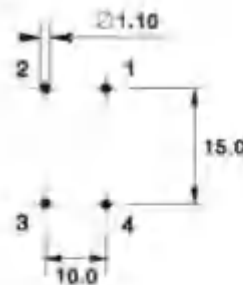
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
TRF112A-701N	0.7	±30	4.0	0.027
TRF112A-102N	1.0		2.0	0.06
TRF112A-222N	2.2		2.0	0.10
TRF112A-332N	3.3		1.5	0.15
TRF112A-662N	6.6		1.0	0.30
TRF112A-103N	10		0.7	0.55
TRF112A-153N	15		0.5	0.83
TRF112A-273N	27		0.4	1.20
TRF112A-393N	39		0.4	1.70

### PHYSICAL CHARACTERISTICS:

Dimensions 1



Hole pattern(In mm)



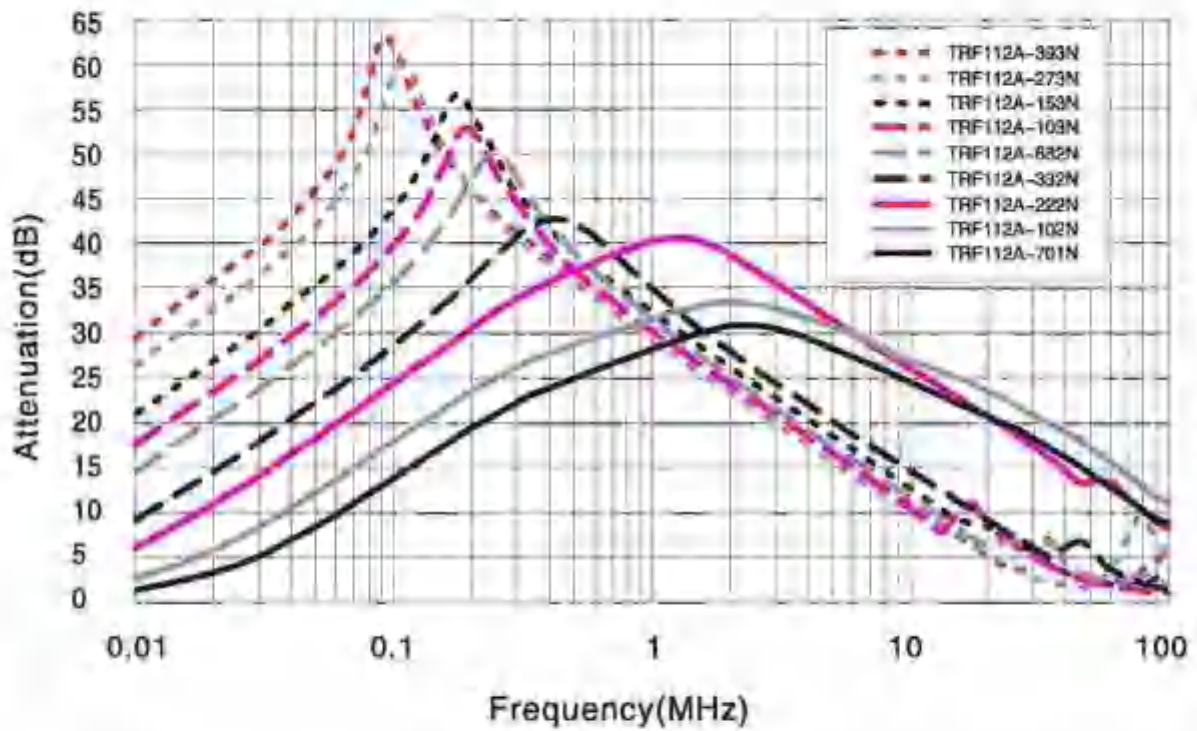
Winding



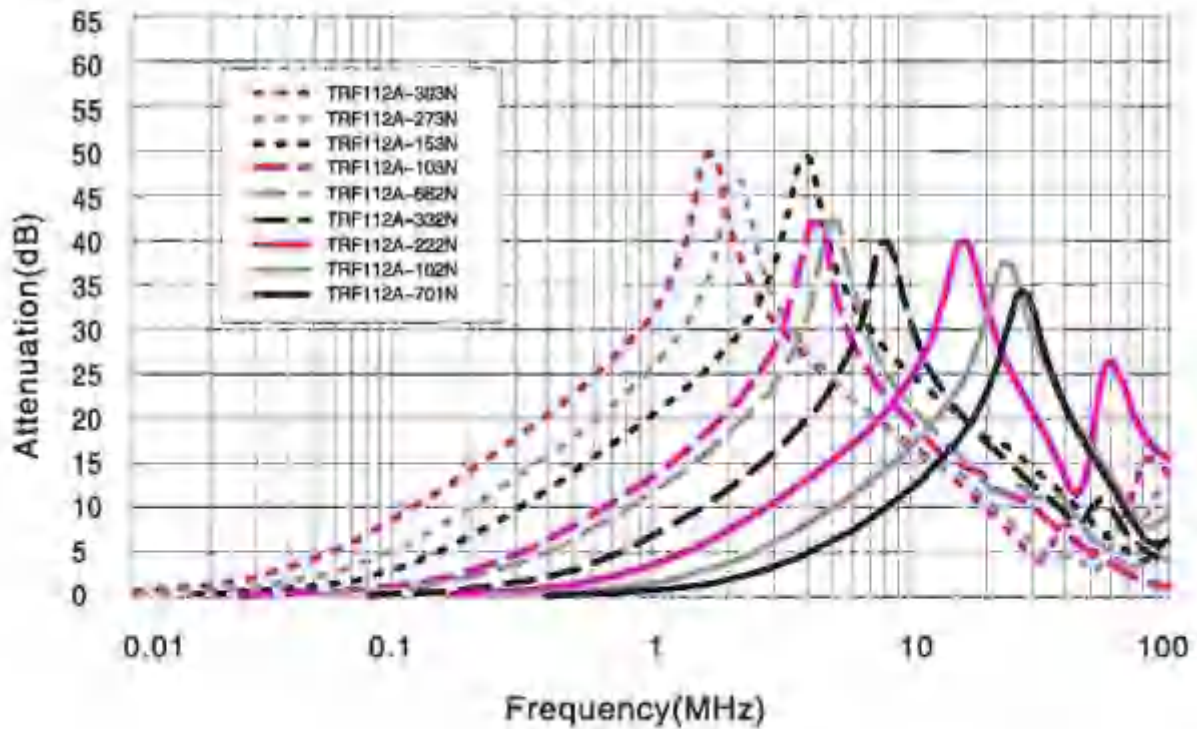
Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	1500V
Operating temperature.....	-25 °C to +125 °C
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF114A SERIES



### FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core choke with sector winding
- High interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

### APPLCIATIONS:

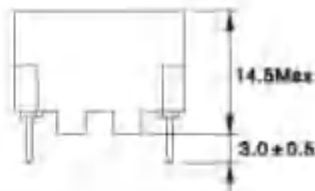
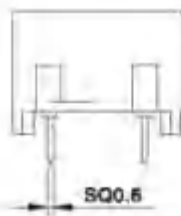
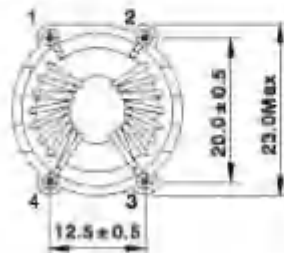
- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

### ELECTRICAL CHARACTERISTICS:

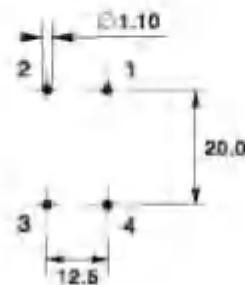
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
TRF114A-122N	1.2	± 30	3.0	0.04
TRF114A-222N	2.2		2.0	0.08
TRF114A-422N	4.2		1.9	0.12
TRF114A-682N	6.8		1.5	0.2
TRF114A-103N	10		1.3	0.25
TRF114A-273N	27		0.8	0.7
TRF114A-473N	47		0.4	2.0

### PHYSICAL CHARACTERISTICS:

Dimensions 1



Hole pattern (In mm)



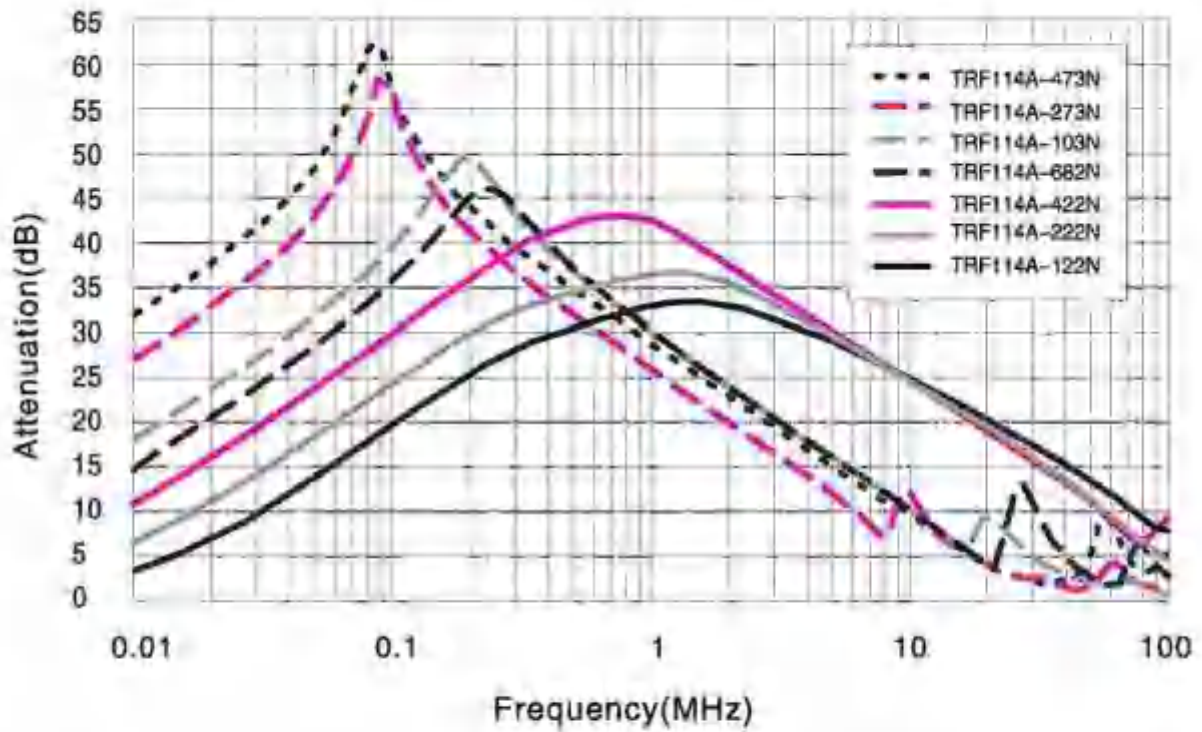
Winding



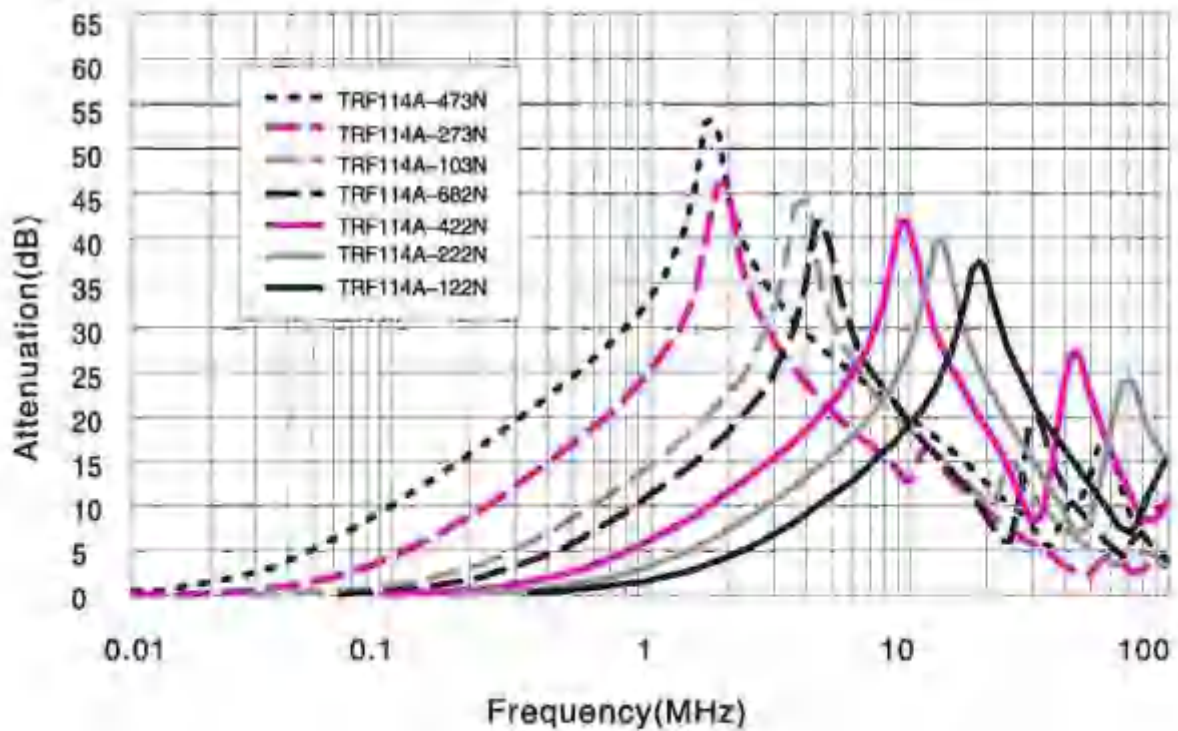
Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	1500V
Operating temperature.....	-25 °C to +125 °C
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF1205VT SERIES



### FEATURES:

- Core material: Ni-Zn
- High suppression rates of asymmetric interference at high and medium frequencies
- Compact size
- High interference stability against RF interference and burst signals
- Noise suppression up to 300MHz

### APPLICATIONS:

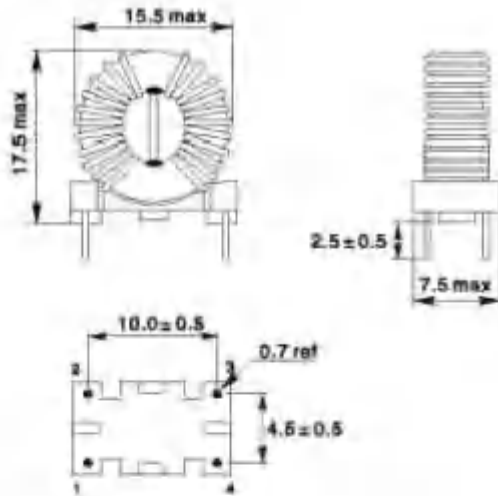
- Power electronics
- Suppression for common mode noise
- Radio interference suppression in motors
- Power line input and output filter

### ELECTRICAL CHARACTERISTICS:

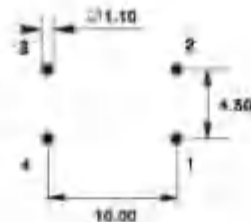
Part Number	L (uH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF1205VT-140N	14	± 30	4	15
TRF1205VT-300N	30		3	26
TRF1205VT-470N	47		2	40
TRF1205VT-101N	100		1.5	80

### PHYSICAL CHARACTERISTICS:

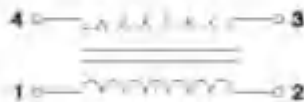
Dimensions 1



Hole pattern(in mm)



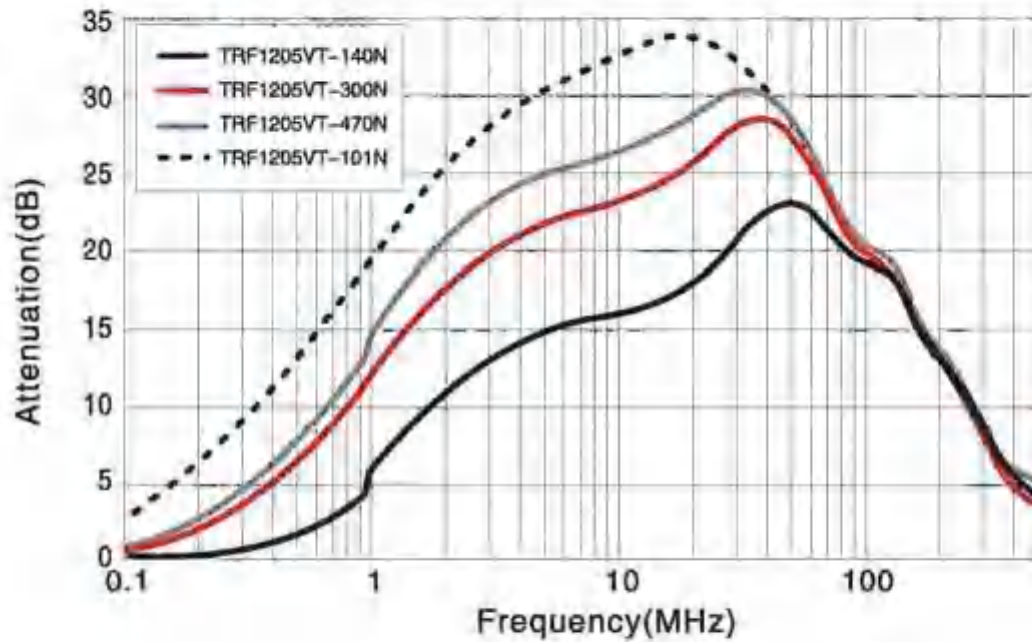
### Winding



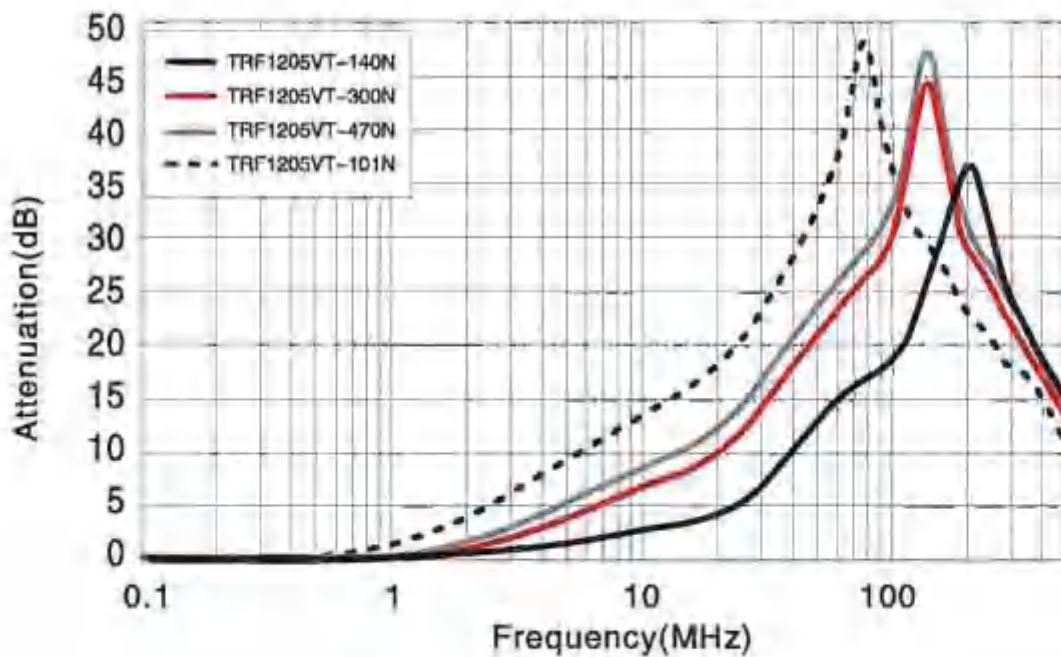
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF1206VT SERIES



### FEATURES:

- With this product you can achieve high suppression of asymmetric interferences even at low frequency ranges
- Broadband filtering because of low capacitance winding technique
- Very compact design
- Highest possible current with small sizes
- High interference compression asymmetric interference rates also at low frequency range

### APPLICATIONS:

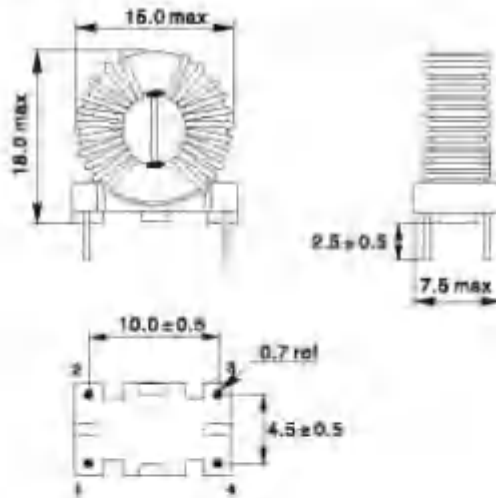
- Power electronics
- Suppression for common mode noise
- Radio interference suppression in motors
- Power line input and output filter

### ELECTRICAL CHARACTERISTICS:

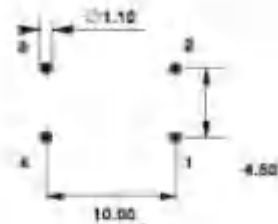
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF1206VT-102N	1	+30	2.0	45
TRF1206VT-402N	4		1.5	140
TRF1206VT-502N	5		1.0	220
TRF1206VT-103N	10		0.7	350
TRF1206VT-203N	20		0.5	1000
TRF1206VT-303N	30		0.3	3000

### PHYSICAL CHARACTERISTICS:

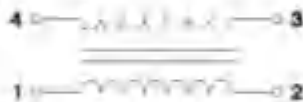
Dimensions 1



Hole pattern (in mm)



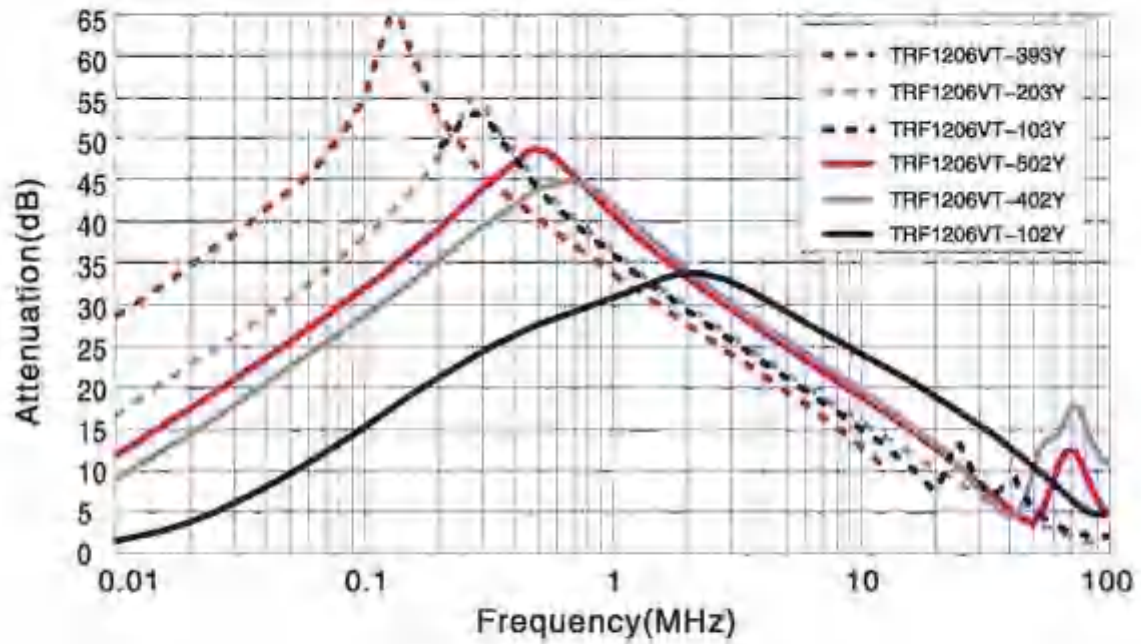
### Winding



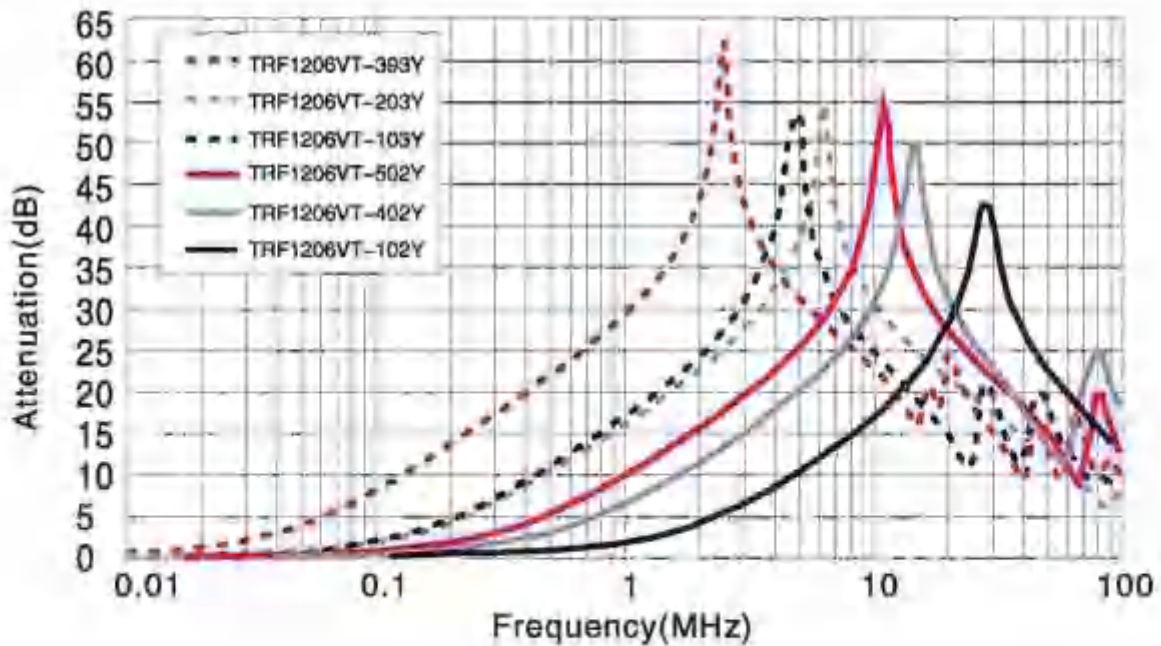
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF122A SERIES



### FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core choke with sector winding
- High interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

### APPLICATIONS:

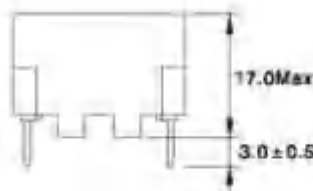
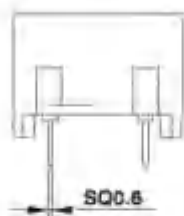
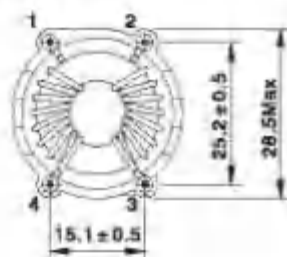
- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

### ELECTRICAL CHARACTERISTICS:

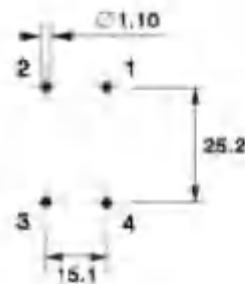
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
TRF122A-272N	2.7	±30	3.0	0.06
TRF122A-562N	5.6		2.0	0.16
TRF122A-562NC	5.6		2.4	0.10
TRF122A-273N	27.0		1.0	0.54

### PHYSICAL CHARACTERISTICS:

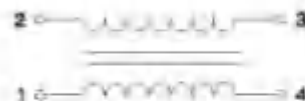
Dimensions 1



Hole pattern (in mm)



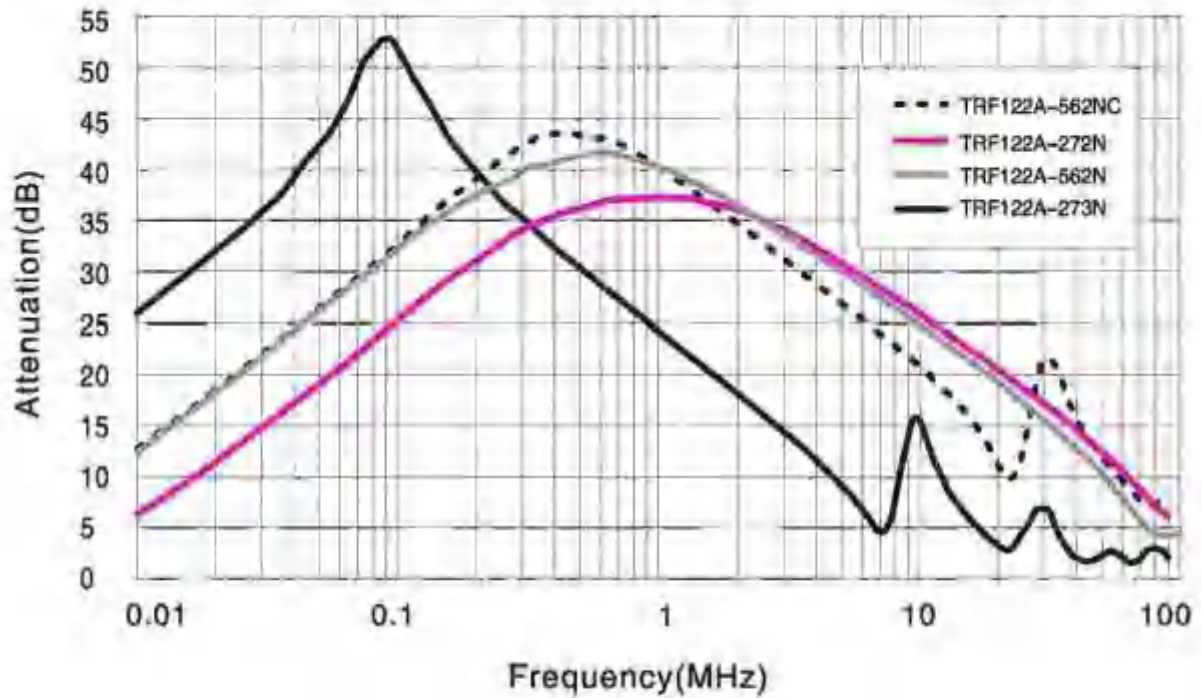
Winding



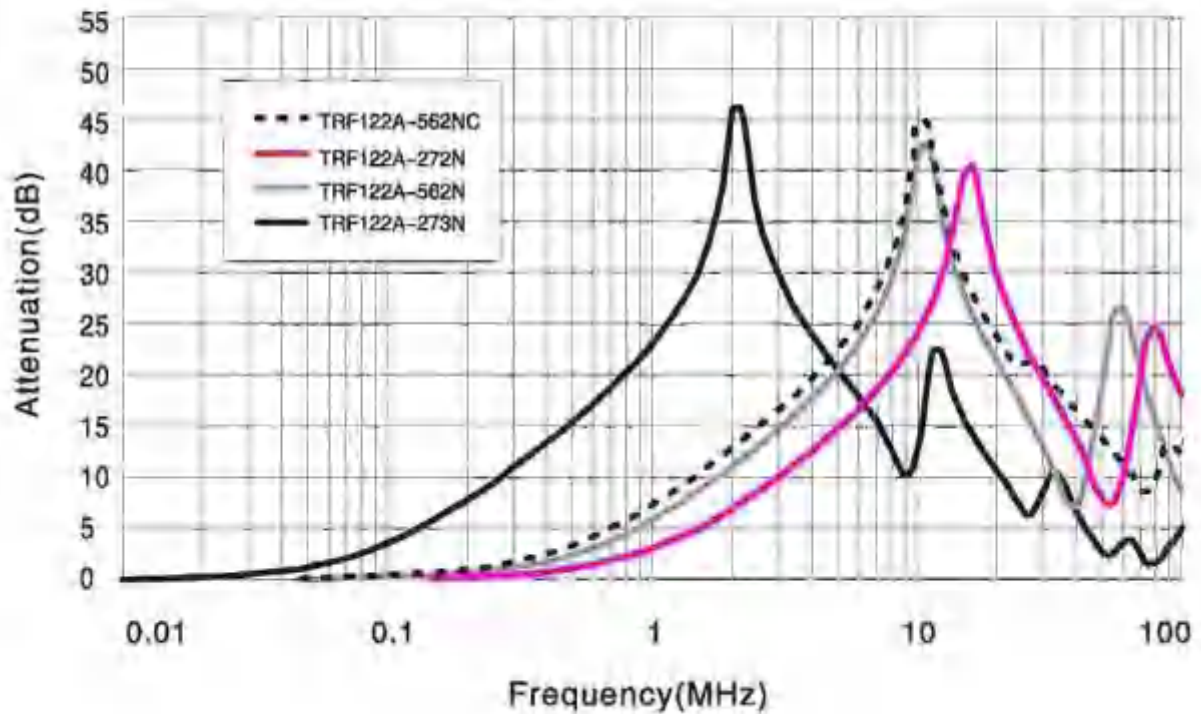
**Note:**

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-25 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# HIGH CURRENT COMMON MODE POWER LINE CHOKE TRF1407VT-HC SERIES



## FEATURES:

- With this product you can achieve high suppression of asymmetric interferences even at low frequency ranges
- Broadband filtering because of low capacitance winding technique
- Very compact design
- Highest possible current with small sizes
- High interference compression asymmetric interference rates also at low frequency range

## APPLICATIONS:

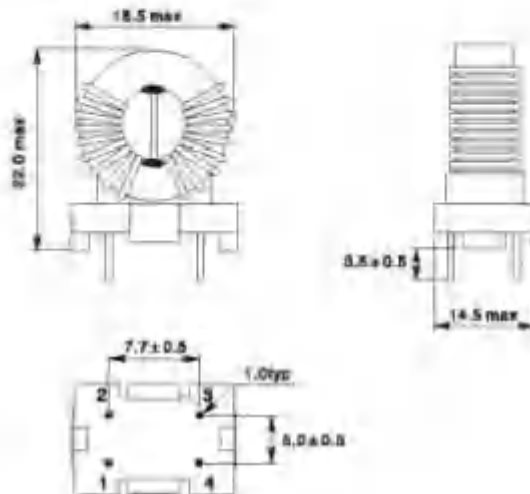
- Power electronics
- Power line input and output filter
- For filtering of devices without a stable ground connection
- Radio interference suppression in motors

## ELECTRICAL CHARACTERISTICS:

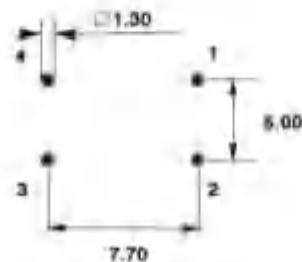
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF1407VT-HC-171N	0.175	± 30	10.0	4.0
TRF1407VT-HC-351N	0.350		8.5	7.0
TRF1407VT-HC-451N	0.450		6.5	10.0
TRF1407VT-HC-701N	0.700		5.0	15.0

## PHYSICAL CHARACTERISTICS:

Dimensions 1



Hole pattern (in mm)



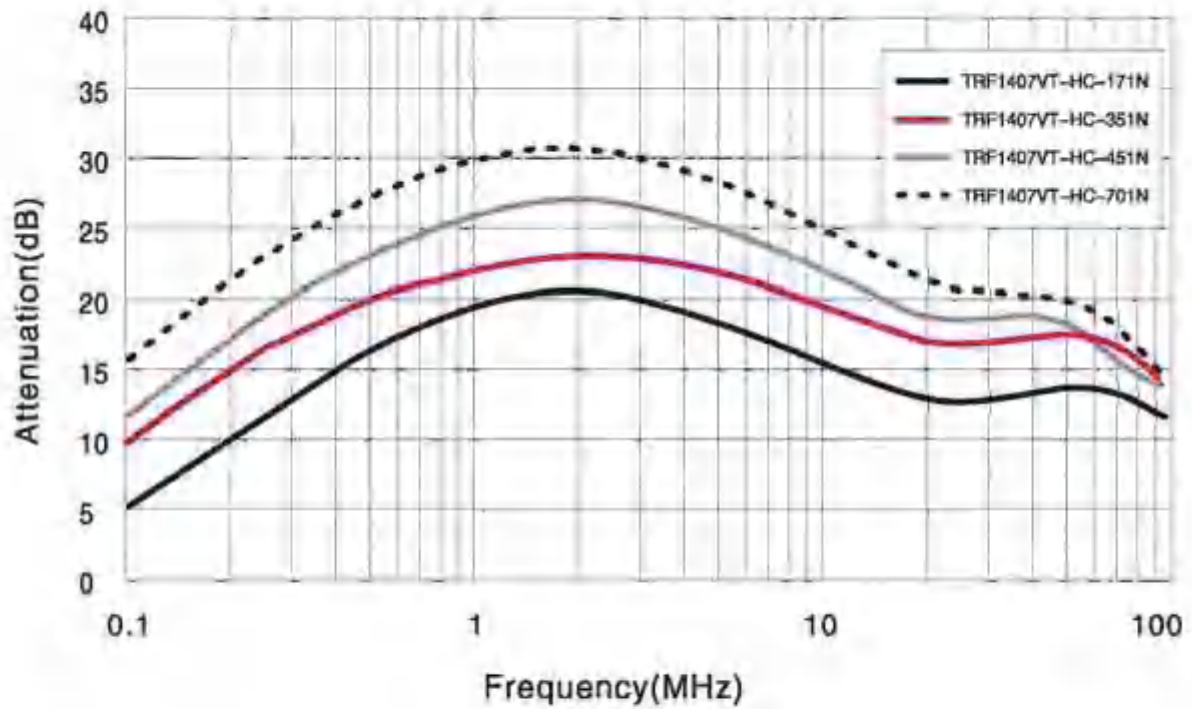
## Winding



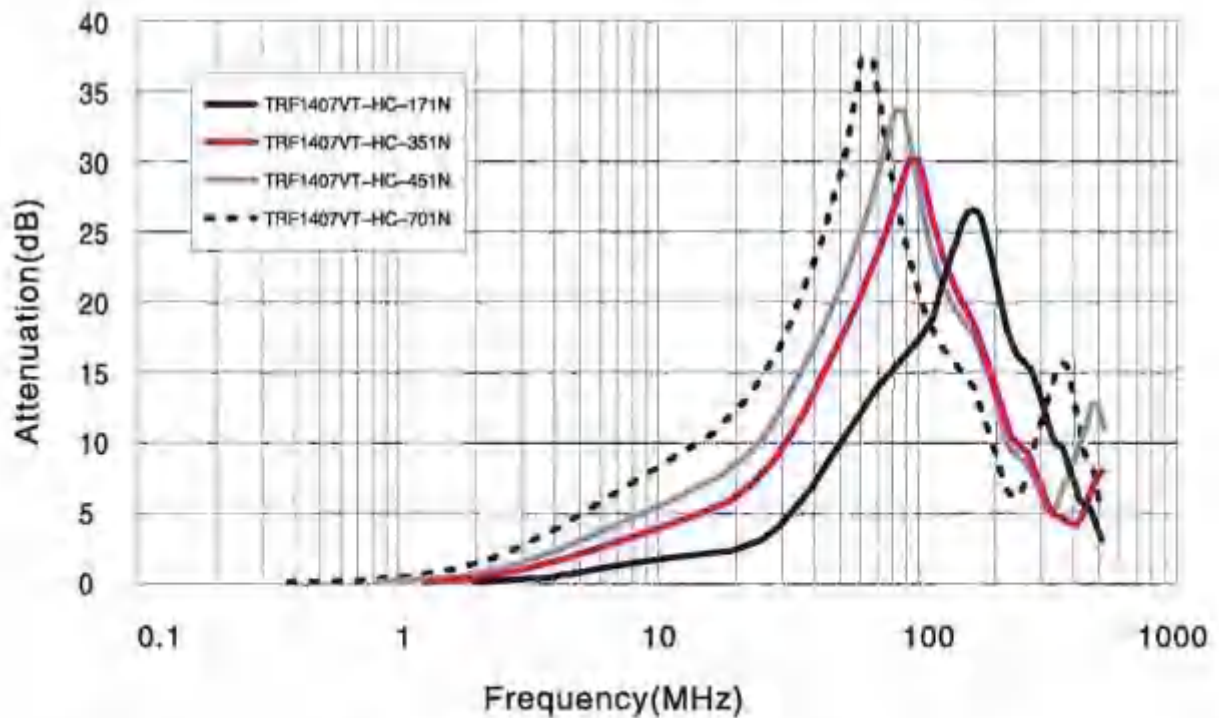
## Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF1407VT-LC SERIES



### FEATURES:

- With this product you can achieve high suppression of asymmetric interferences even at low frequency ranges
- Broadband filtering because of low capacitance winding technique
- Very compact design
- Highest possible current with small sizes
- High interference compression asymmetric interference rates also at low frequency range

### APPLICATIONS:

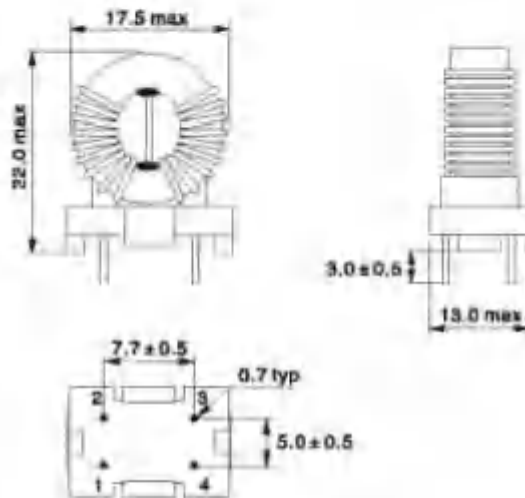
- Power electronics
- Suppression for common mode noise
- Radio interference suppression in motors
- Power line input and output filter

### ELECTRICAL CHARACTERISTICS:

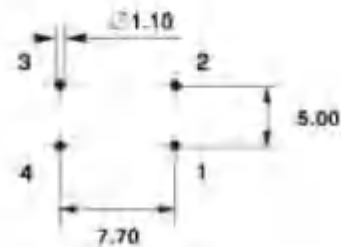
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF1407VT-LC-102N	1.0	±30	3.0	35
TRF1407VT-LC-222N	2.2		2.0	70
TRF1407VT-LC-332N	3.3		1.5	120
TRF1407VT-LC-103N	10.0		1.0	360
TRF1407VT-LC-203N	20.0		0.5	540

### PHYSICAL CHARACTERISTICS:

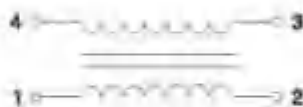
Dimensions 1



Hole pattern(in mm)



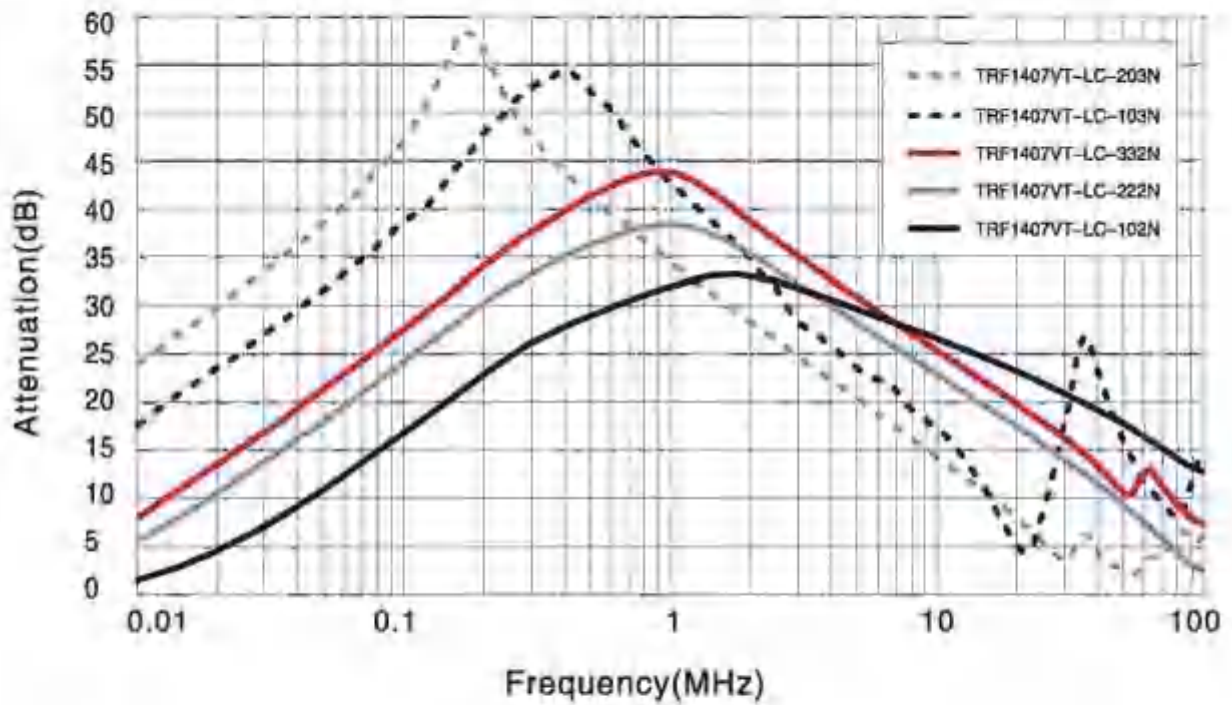
### Winding



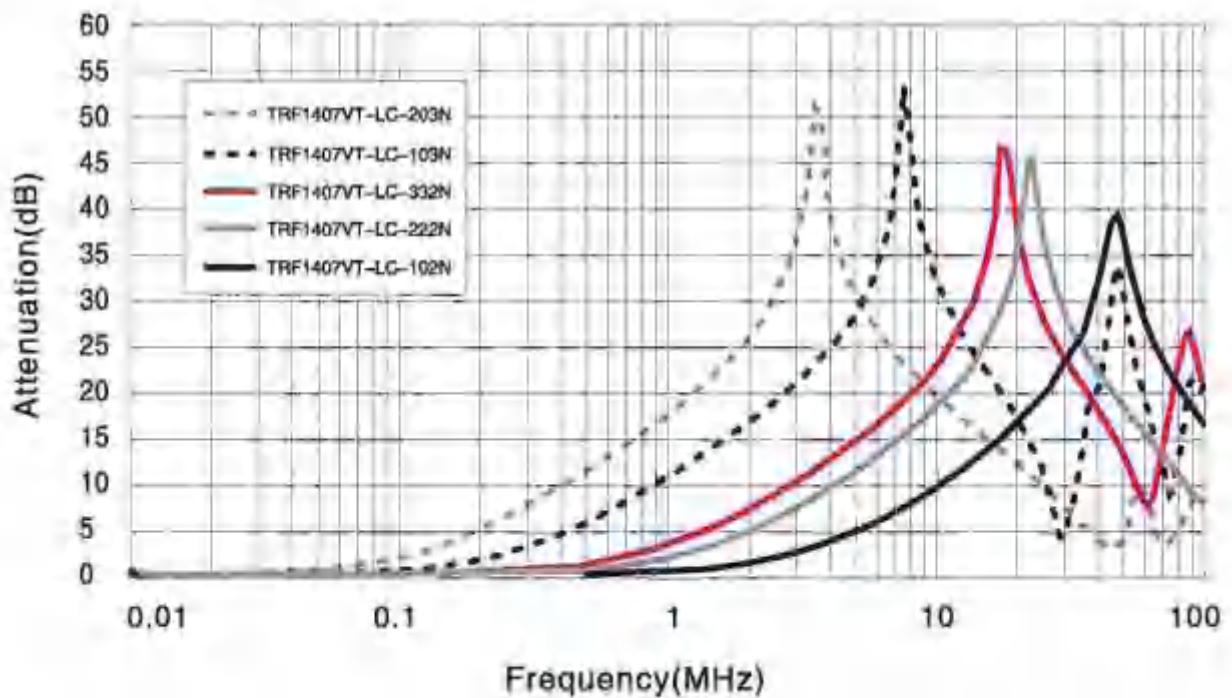
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF1407VT-NZ SERIES



### FEATURES:

- Core material: Ni-Zn
- High suppression rates of asymmetric interference at high and medium frequencies
- Compact size
- High interference stability against RF interference and burst signals
- Noise suppression up to 300MHz

### APPLICATIONS:

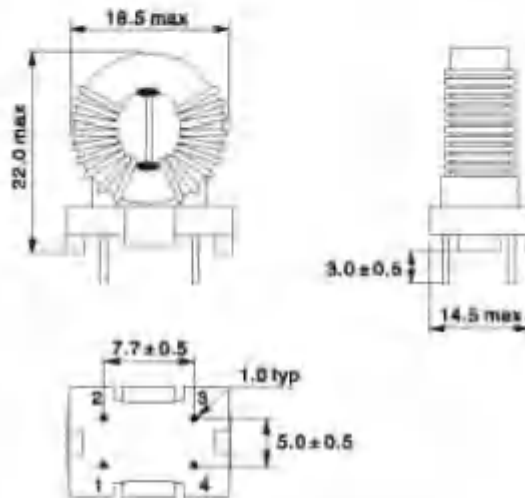
- Power electronics
- Suppression for common mode noise
- Radio interference suppression in motors
- Power line input and output filter

### ELECTRICAL CHARACTERISTICS:

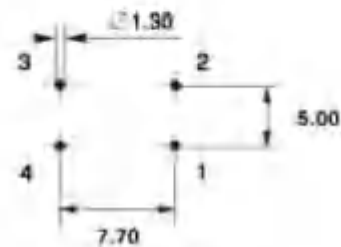
Part Number	L (μH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF1407VT-NZ-160N	16	±30	10.0	2.7
TRF1407VT-NZ-320N	32		8.5	5.5
TRF1407VT-NZ-420N	42		6.5	8.1
TRF1407VT-NZ-650N	65		5.5	13
TRF1407VT-NZ-111N	110		3	31

### PHYSICAL CHARACTERISTICS:

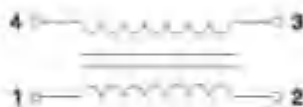
Dimensions 1



Hole pattern(in mm)



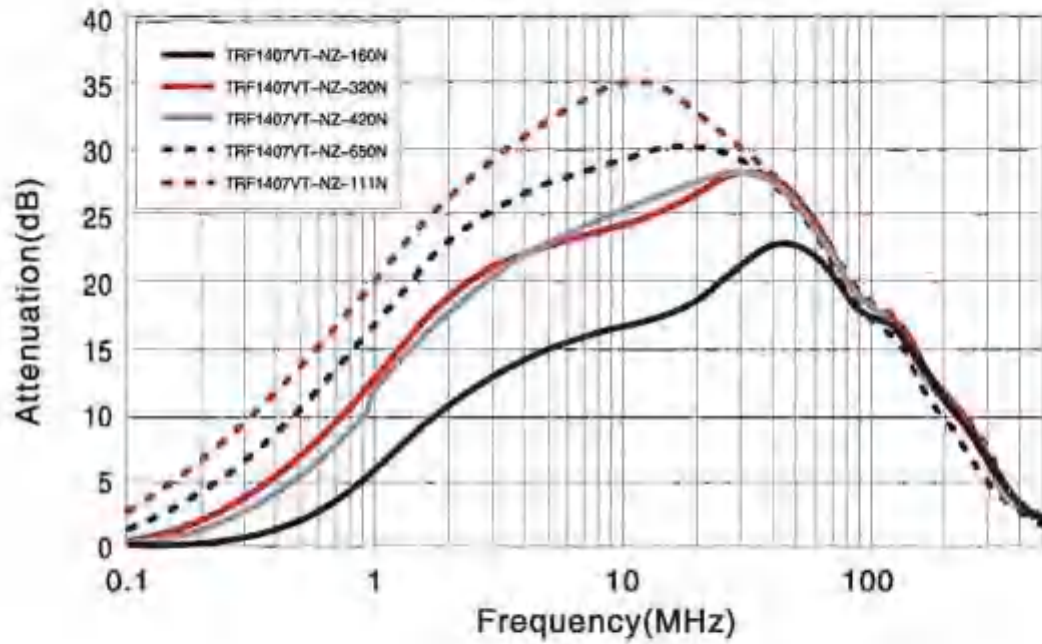
### Winding



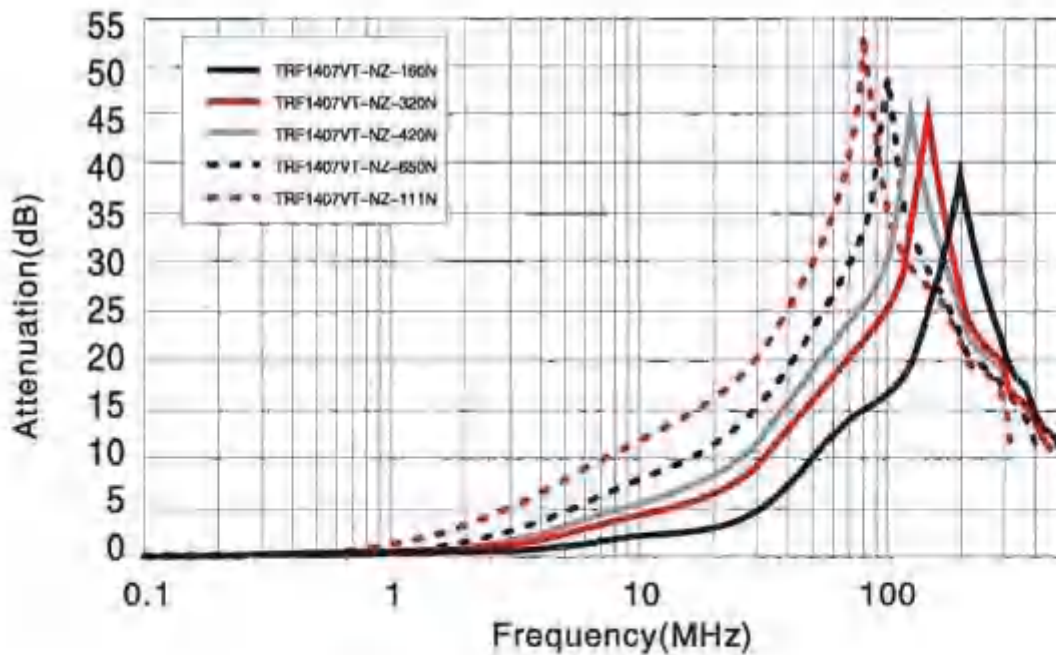
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF142A SERIES



### FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core choke with sector winding
- High interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

### APPLICATIONS:

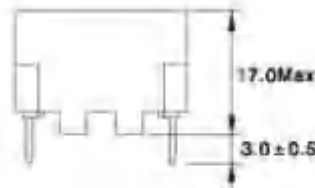
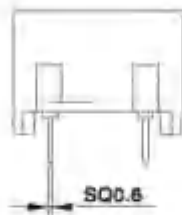
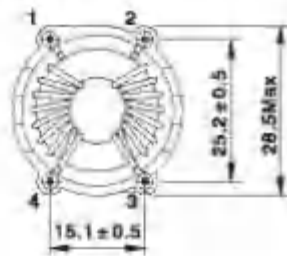
- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

### ELECTRICAL CHARACTERISTICS:

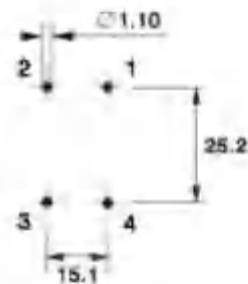
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
TRF142A-182N	1.8	±30	6.0	0.03
TRF142A-332N	3.3		4.0	0.065
TRF142A-103NC	10.0		3.0	0.155
TRF142A-273N	27.0		1.2	0.40

### PHYSICAL CHARACTERISTICS:

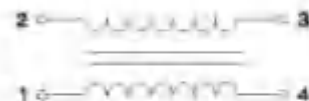
Dimensions 1



Hole pattern (in mm)



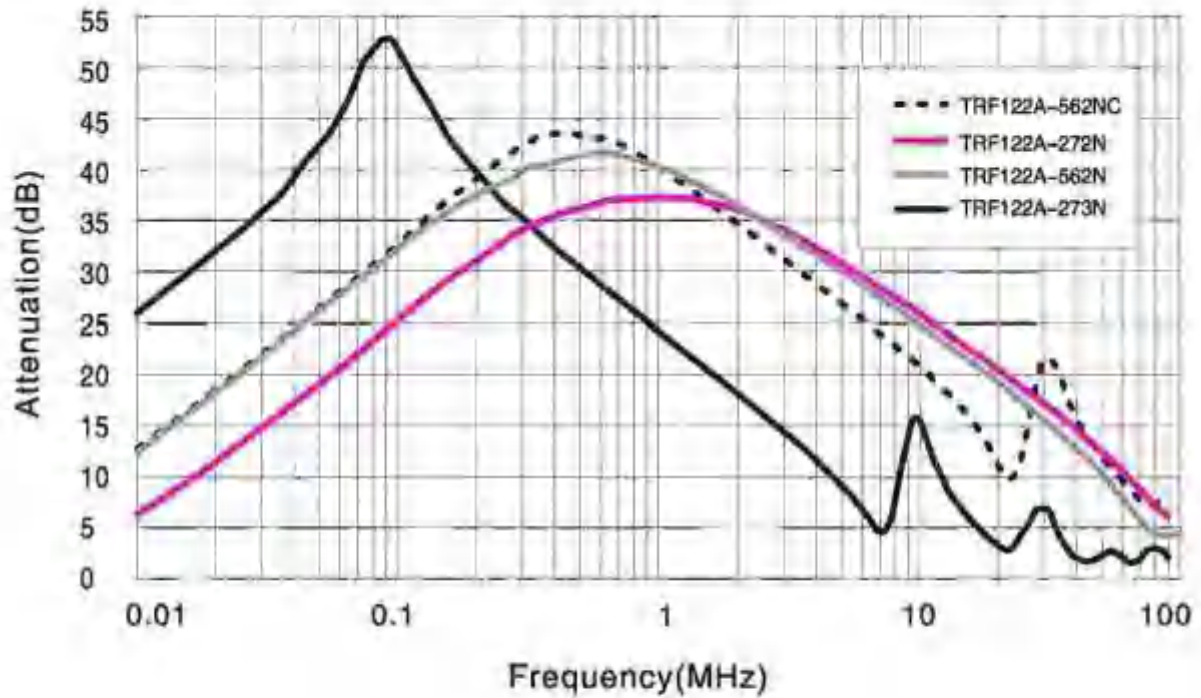
Winding



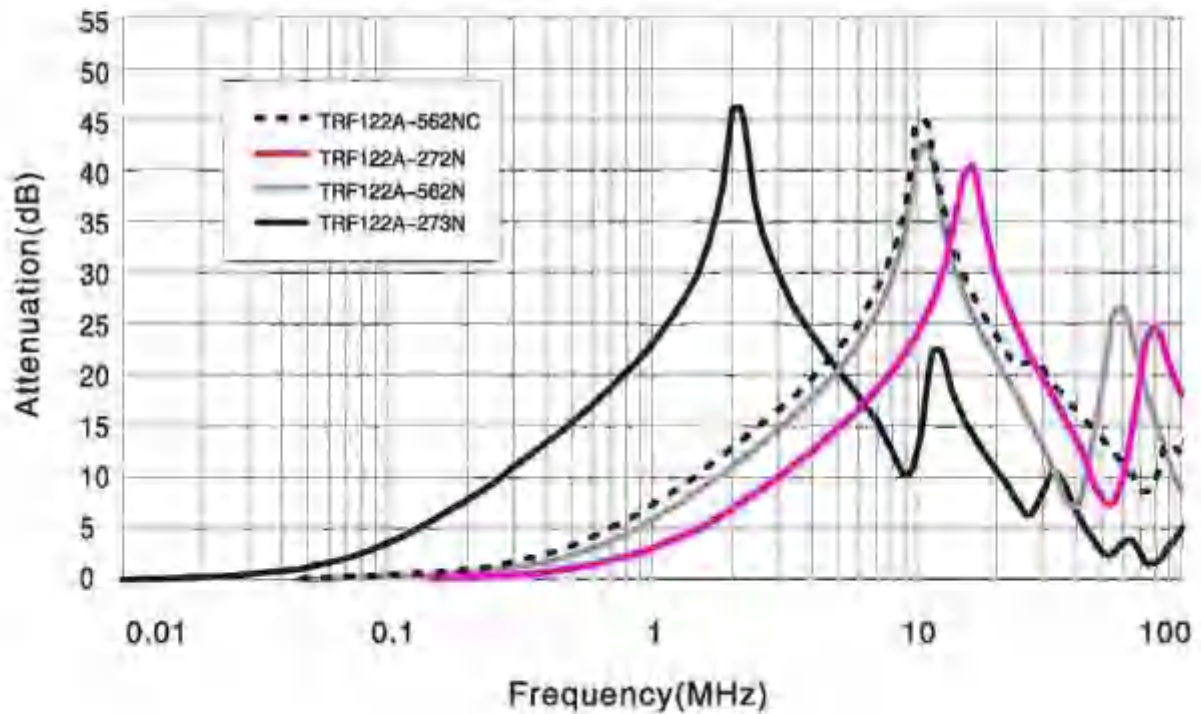
**Note:**

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-25 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF1608VT SEIRES



### FEATURES:

- Very high permeability nanocrystalline core material
- Improved isolation through plastic case and winding spacer
- High and stable inductance values at high temperatures
- High rated currents
- Broadband suppression
- Small size

### APPLICATIONS:

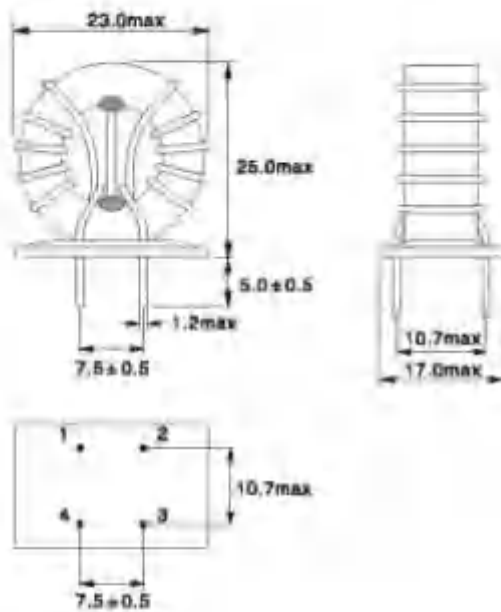
- Power electronics
- Power line in- and output filter
- Suppression for common mode noise
- Radio interference suppression in motors

### ELECTRICAL CHARACTERISTICS:

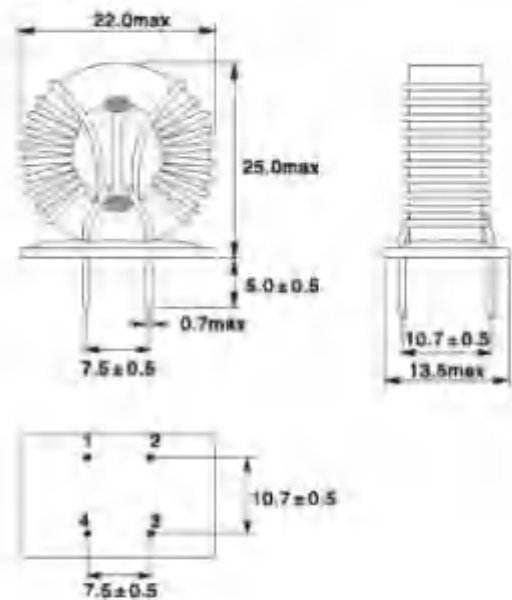
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)	Dimensions
TRF1608VT-102Y	1	± 50	15	3.3	1
TRF1608VT-202Y	2		10	6	1
TRF1608VT-902Y	9		5.0	28	2
TRF1608VT-173Y	17		4.0	50	2
TRF1608VT-333Y	33		2.5	90	2

### PHYSICAL CHARACTERISTICS:

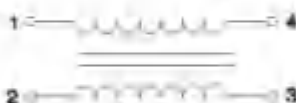
Dimensions 1



Dimensions 2



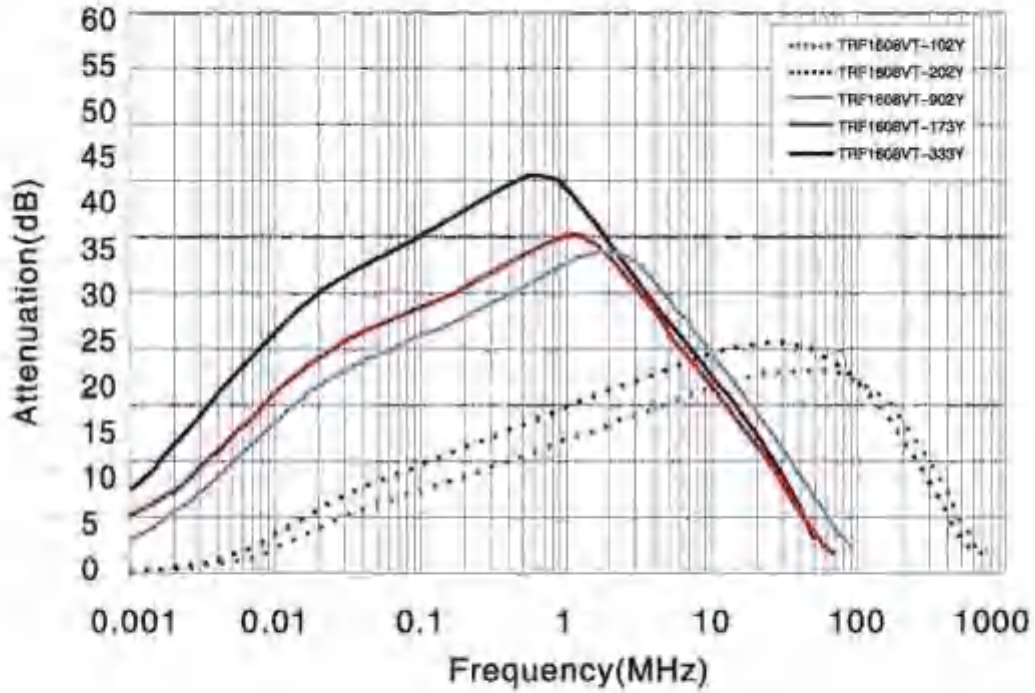
### Winding



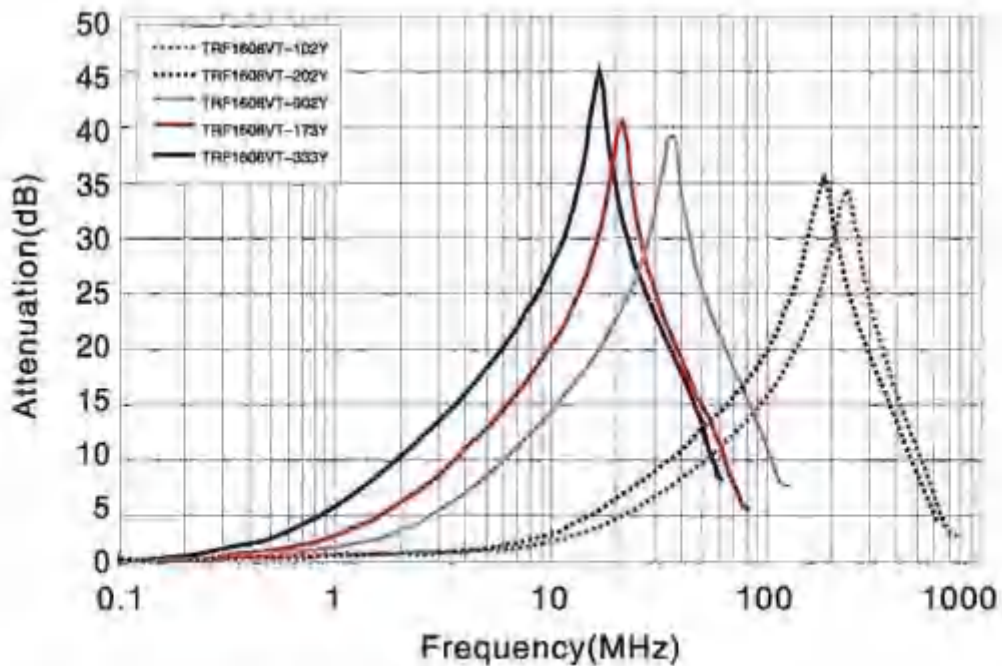
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### INSERTION LOSS COMMON MODE



### INSERTION LOSS DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF2008HT SERIES



### FEATURES:

- Horizontal design for compact housings
- Suppression even at low frequency ranges
- Broadband filtering because of low capacitance winding technique
- Highest possible current with small sizes

### APPLICATIONS:

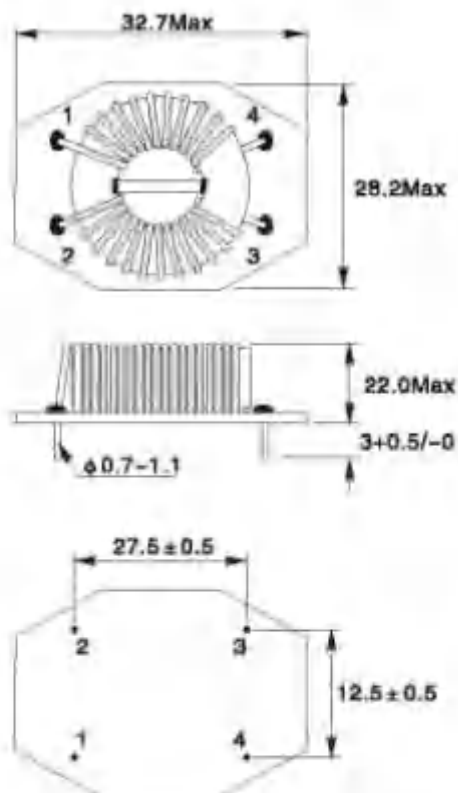
- Power electronics
- Power line input and output filter
- Radio interference suppression in motors
- Suppression of common mode noise

### ELECTRICAL CHARACTERISTICS:

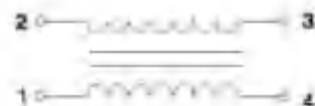
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF2008HT-102N	1.0	±30	10	12.5
TRF2008HT-222N	2.2		6	22
TRF2008HT-332N	3.3		5	37
TRF2008HT-502N	5.0		4	50
TRF2008HT-702N	7.0		3.5	80

### PHYSICAL CHARACTERISTICS:

Dimensions 1



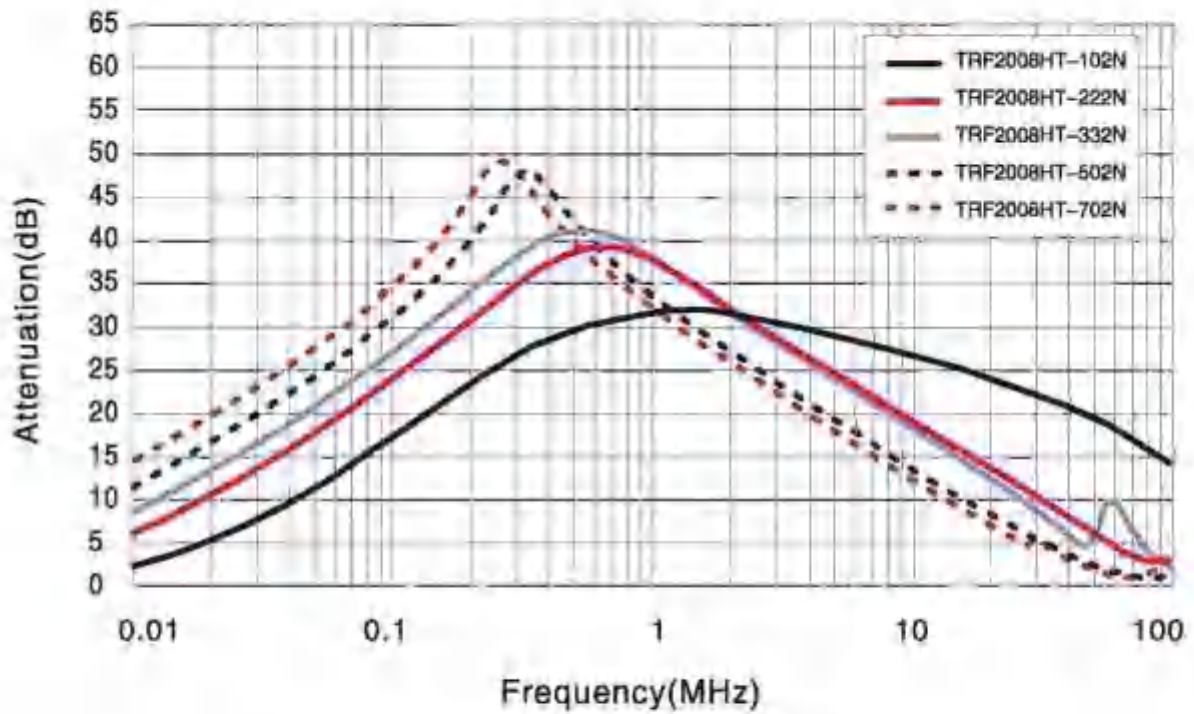
Winding



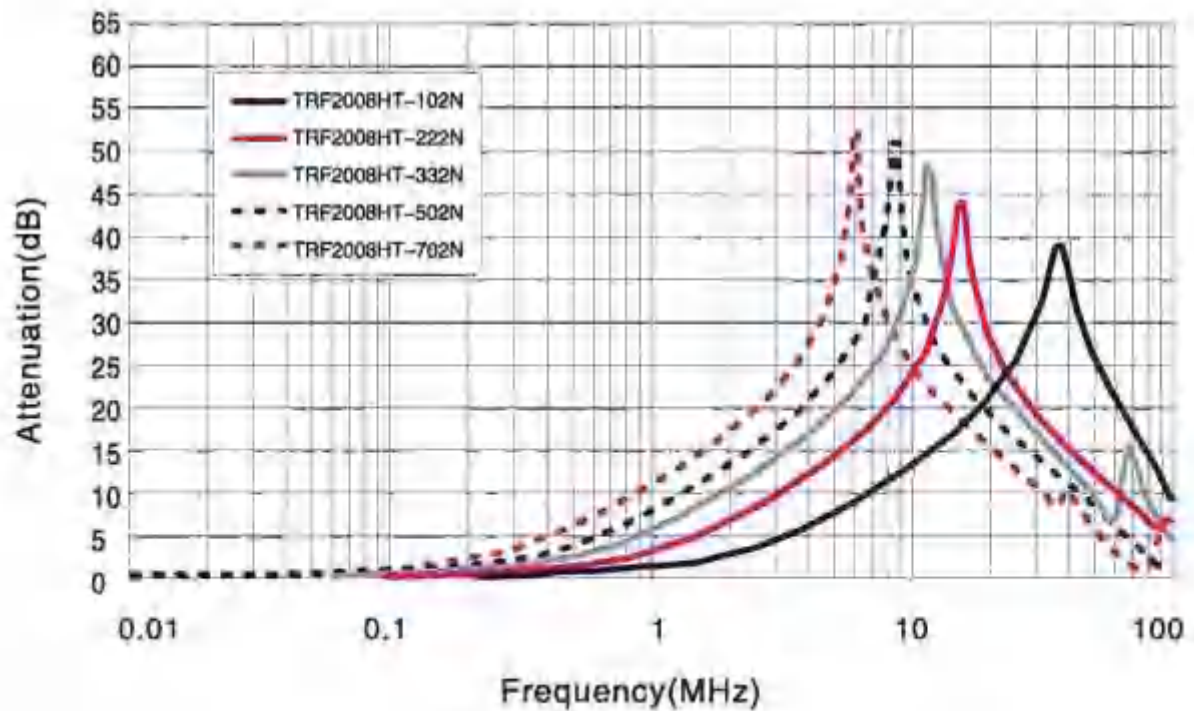
Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	1500V
Operating temperature.....	-40 °C to +125 °C
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF2010VT SERIES



### FEATURES:

- With this product you can achieve high suppression of asymmetric interferences even at low frequency ranges
- Broadband filtering because of low capacitance winding technique
- Very compact design
- Highest possible current with small sizes
- High interference compression asymmetric interference rates also at low frequency range

### APPLICATIONS:

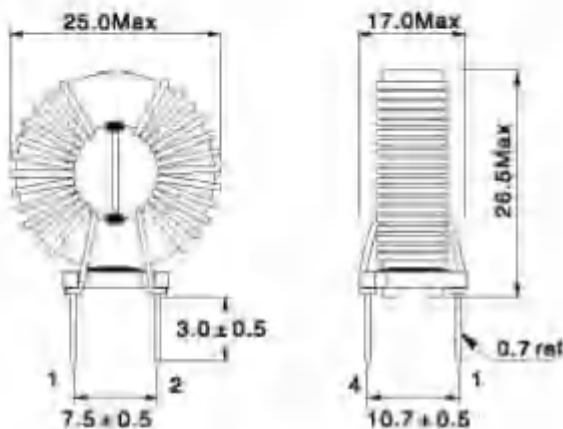
- Power electronics
- Suppression for common mode noise
- Radio interference suppression in motors
- Power line input and output filter

### ELECTRICAL CHARACTERISTICS:

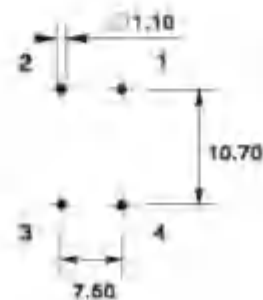
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF2010VT-102N	1.0	± 30	6.0	13
TRF2010VT-222N	2.2		4.0	30
TRF2010VT-332N	3.3		2.5	60
TRF2010VT-502N	5.0		2.5	95
TRF2010VT-103N	10.0		2.0	125
TRF2010VT-203N	20.0		1.5	270

### PHYSICAL CHARACTERISTICS:

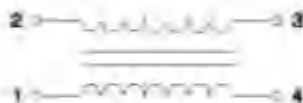
Dimensions 1



Hole pattern (in mm)



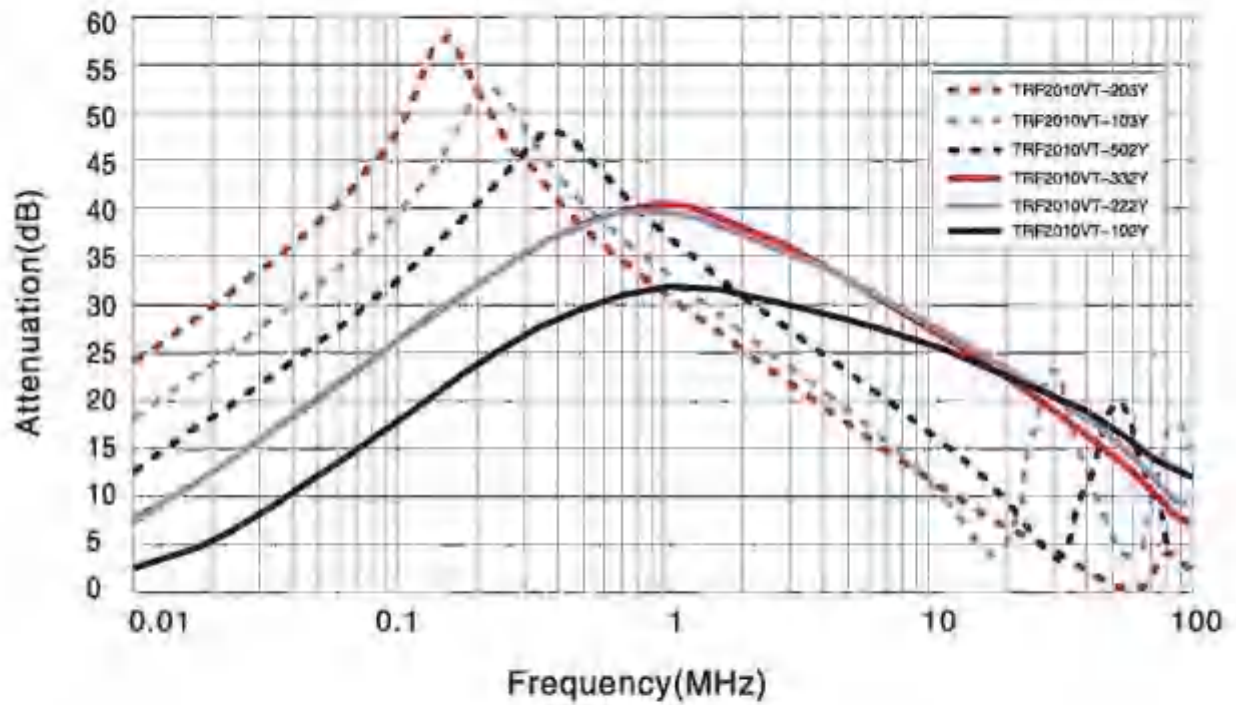
### Winding



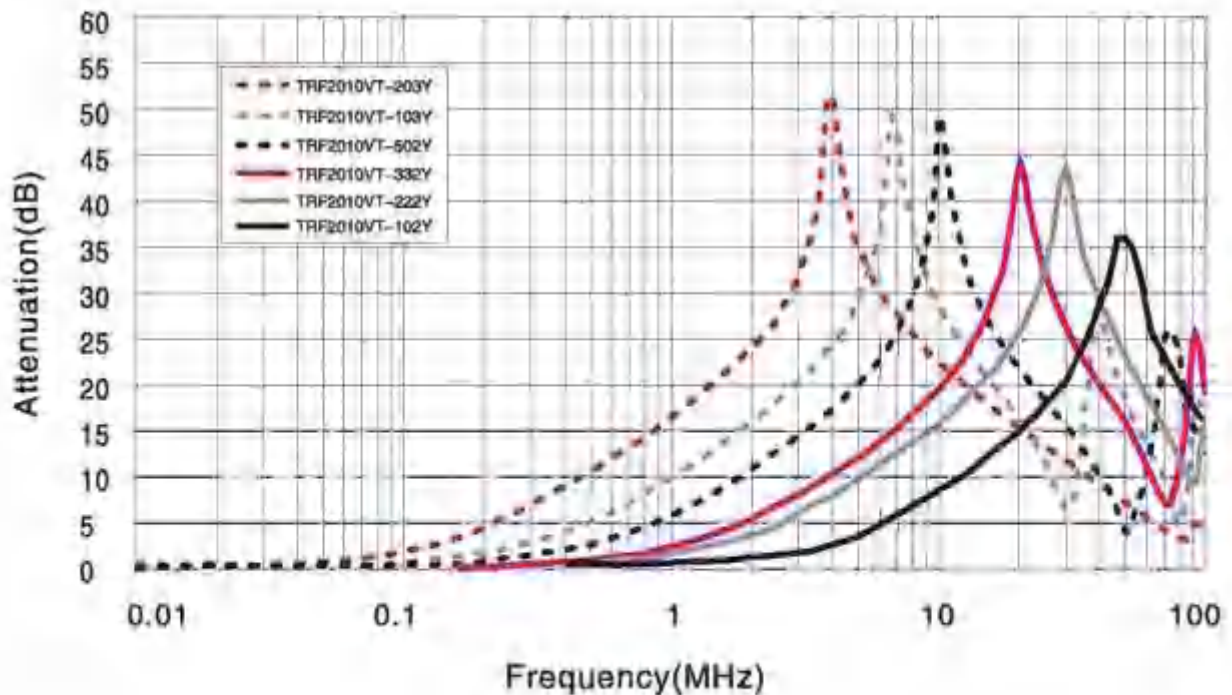
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....L194 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE TRF210 SERIES



## FEATURES:

- High resonance frequency due to special winding technique
- Approx. 0.7% stray inductance for symmetrical interference suppression
- Suitable for wave soldering
- Design complies with EN 60938-2 (VDE 0565-2) and UL 1283
- RoHS-compatible

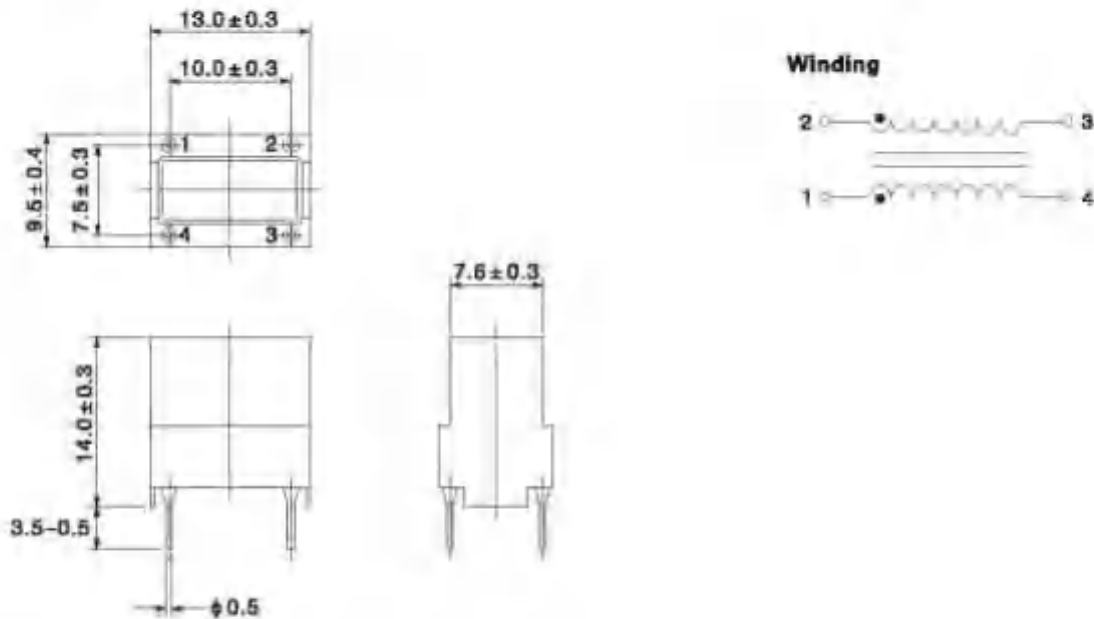
## APPLICATIONS:

- Suppression of common-mode interferences
- Switch-mode power applications
- Electronic ballasts in lamps

## ELECTRICAL CHARACTERISTICS:

Part Number	L(mH) +50%/-30%	Lk(μH) Typ	Rated Current (A)	RDC(mΩ) Max
TRF210-112Y	1.1	6	2.0	65
TRF210-162Y	1.6	10	1.5	110
TRF210-302Y	3.0	20	1.0	220
TRF210-442Y	4.4	30	0.6	400
TRF210-123Y	12	80	0.3	1100
TRF210-223Y	22	130	0.3	1500

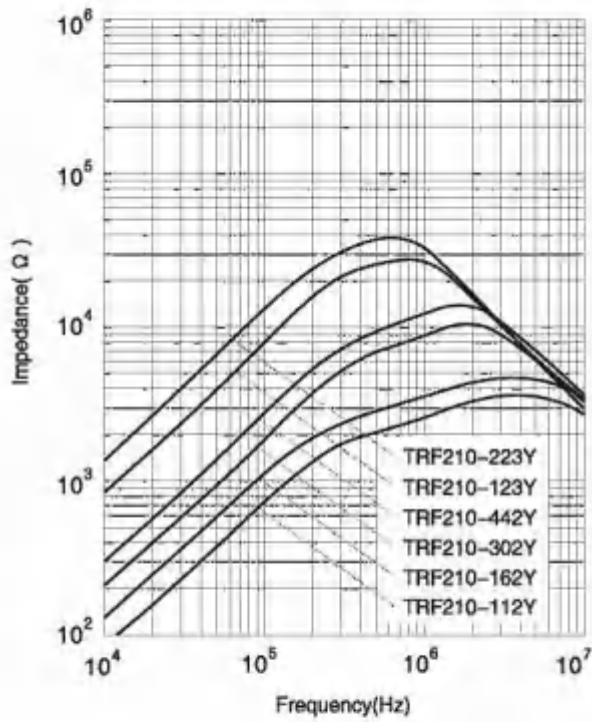
## PHYSICAL CHARACTERISTICS:



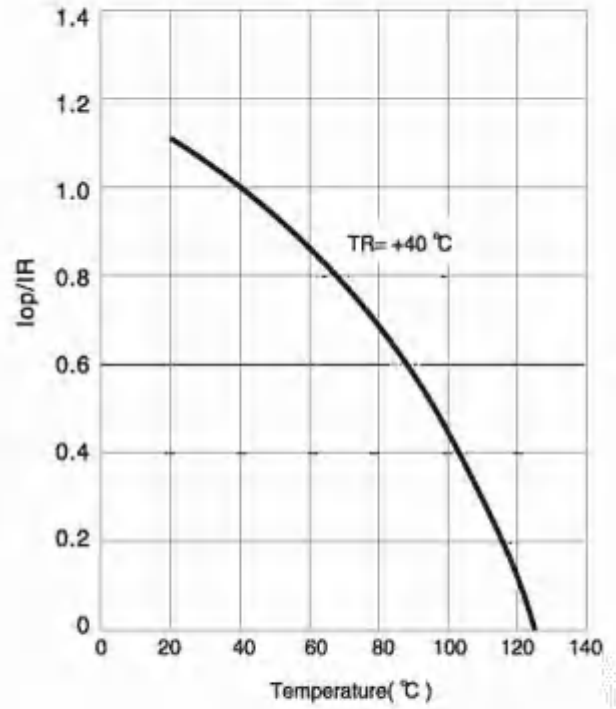
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-25 °C to +125 °C
- Housing.....UL94 V-0

Impedance |Z| versus frequency F  
measured with windings in parallel at +20°C  
typical values



Current derating Iop/IR  
versus ambient temperature TA



# COMMON MODE POWER LINE CHOKE

## TRF2110VT SEIRES



### FEATURES:

- Very high permeability nanocrystalline core material
- Improved isolation through plastic case and winding spacer
- High and stable inductance values at high temperatures
- High rated currents
- Broadband suppression
- Small size

### APPLICATIONS:

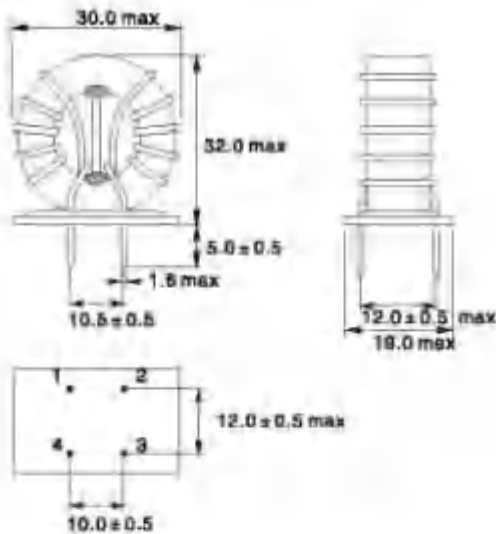
- Power electronics
- Power line in- and output filter
- Suppression for common mode noise
- Radio interference suppression in motors

### ELECTRICAL CHARACTERISTICS:

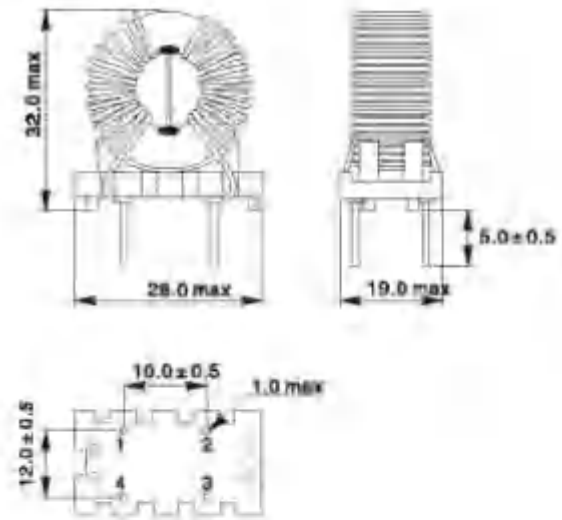
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)	Dimensions
TRF2110VT-102Y	1.0	-30 to +50	20	2.4	1
TRF2110VT-152Y	1.5		18	3.2	1
TRF2110VT-202Y	2.0		15	5	1
TRF2110VT-402Y	4.0		11	8.5	1
TRF2110VT-702Y	7.0		7	20	1
TRF2110VT-153Y	15		5.0	38	2
TRF2110VT-353Y	35		3.5	80	2
TRF2110VT-823Y	62		2.5	170	2

### PHYSICAL CHARACTERISTICS:

Dimensions 1



Dimensions 2



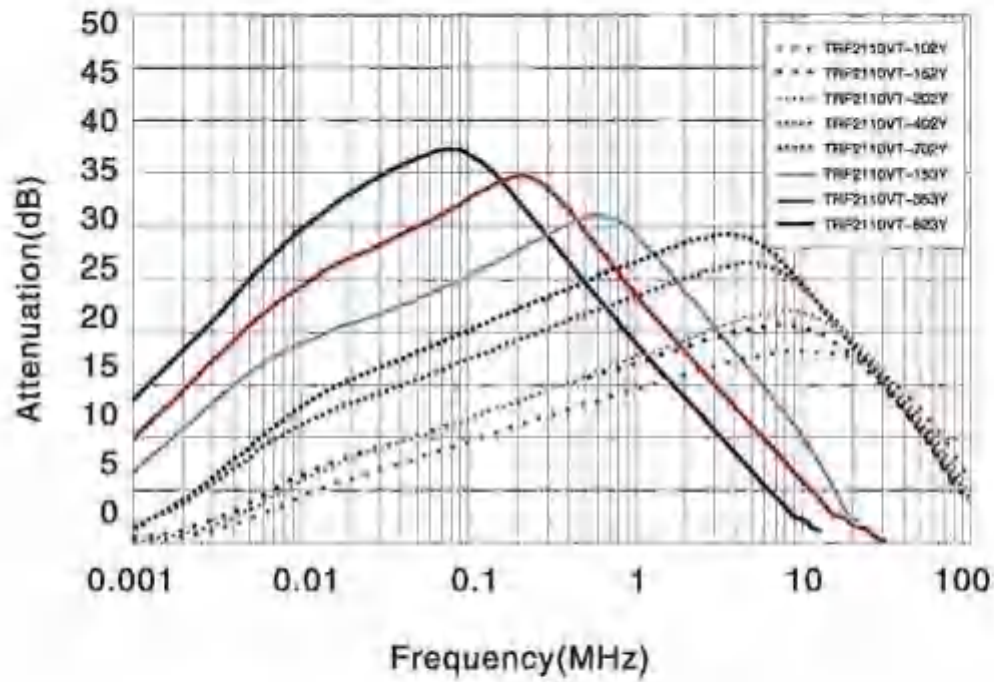
### Winding



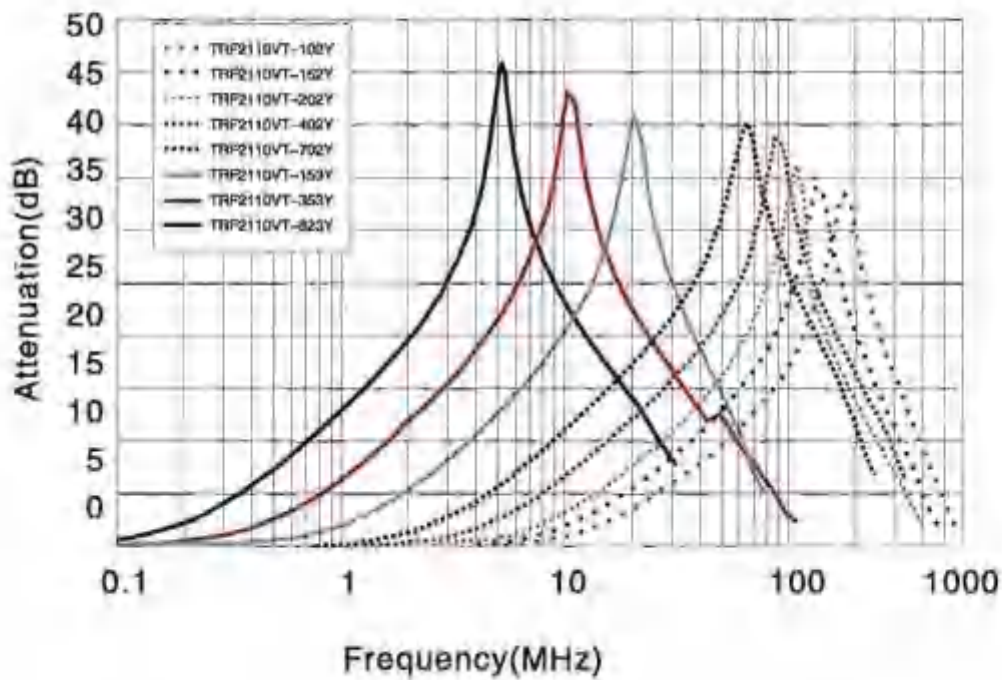
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### INSERTION LOSS COMMON MODE



### INSERTION LOSS DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF212A SERIES



### FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core choke with sector winding
- High Interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

### APPLICATIONS:

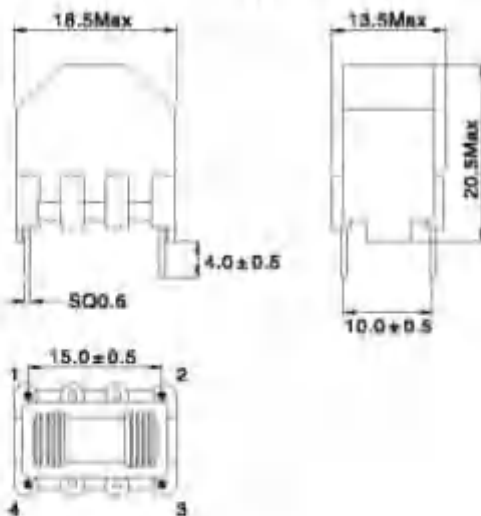
- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

### ELECTRICAL CHARACTERISTICS:

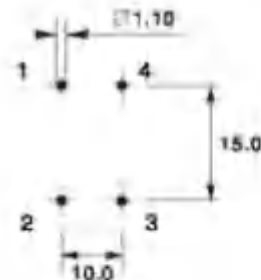
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
TRF212A-401N	0.4	±30	3.8	0.02
TRF212A-102N	1.0		2.0	0.08
TRF212A-332N	3.3		1.5	0.15
TRF212A-682N	6.8		1.0	0.3
TRF212A-103N	10		0.7	0.55
TRF212A-183N	18		0.5	0.75
TRF212A-273N	27		0.4	1.2
TRF212A-393N	39		0.4	1.7
TRF212A-473N	47		0.3	2.6

### PHYSICAL CHARACTERISTICS:

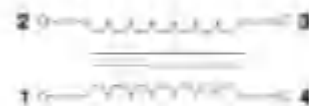
Dimensions 1



Hole pattern(in mm)



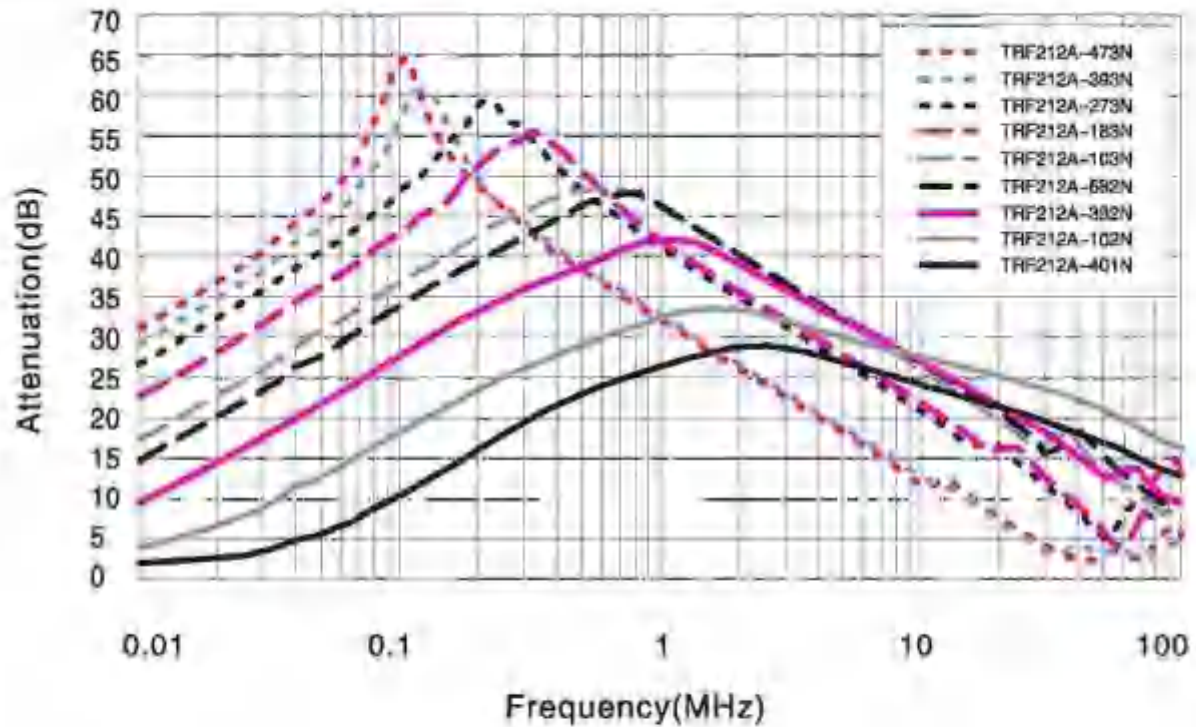
Winding



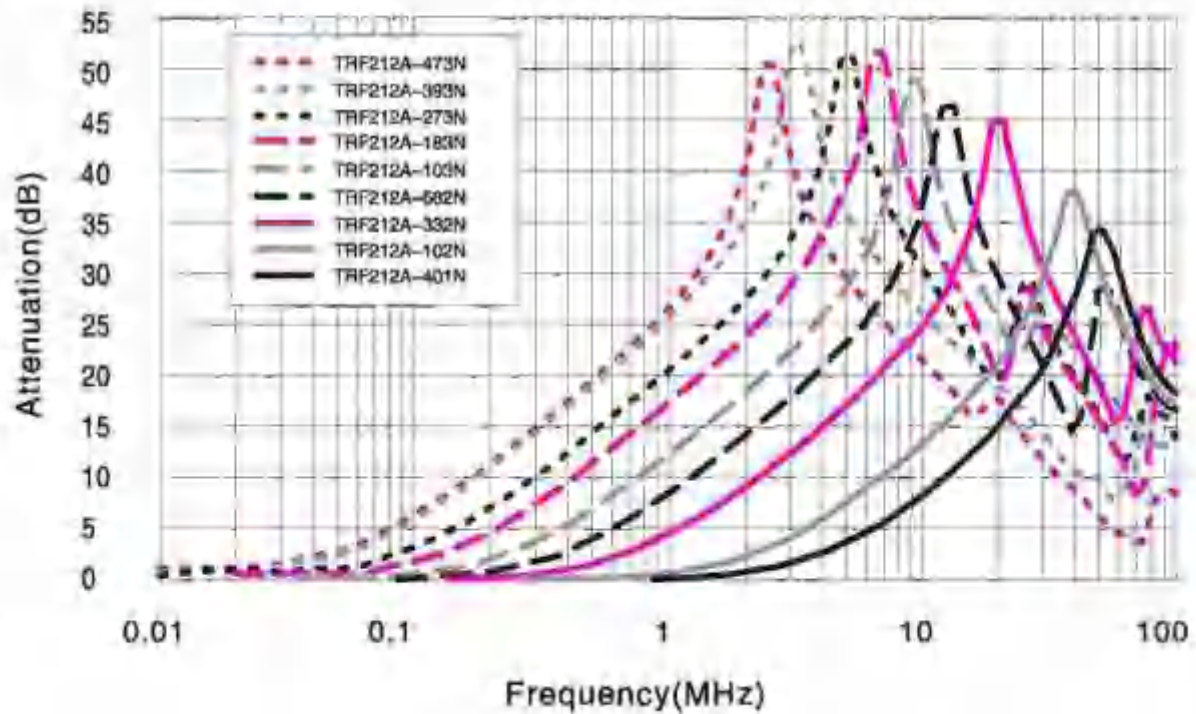
Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	1500V
Operating temperature.....	-25 °C to +125 °C
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF214A SERIES



### FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core chokes with sector winding
- High interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

### APPLICATIONS:

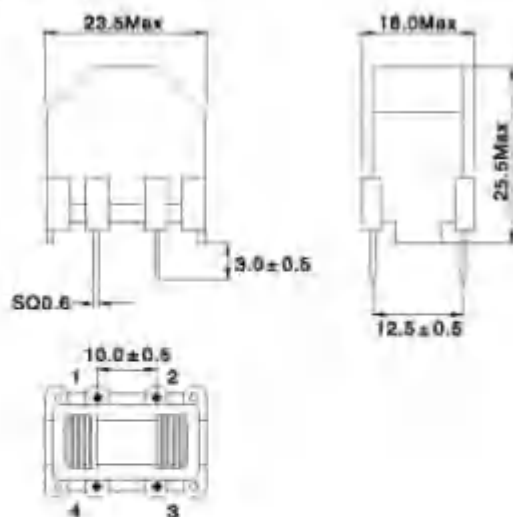
- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

### ELECTRICAL CHARACTERISTICS:

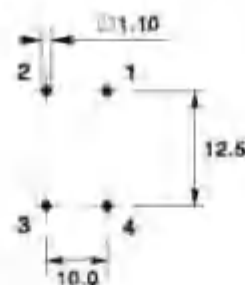
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
TRF214A-701N	0.7	± 30	4.7	0.02
TRF214A-102N	1.0		3.0	0.04
TRF214A-222N	2.2		2.0	0.06
TRF214A-332N	3.3		2.0	0.075
TRF214A-422N	4.2		2.0	0.12
TRF214A-682N	6.8		1.5	0.20
TRF214A-103N	10		1.3	0.25
TRF214A-123N	12		1.2	0.28
TRF214A-273N	27		0.6	0.7
TRF214A-473N	47		0.4	1.8

### PHYSICAL CHARACTERISTICS:

Dimensions 1



Hole pattern (in mm)



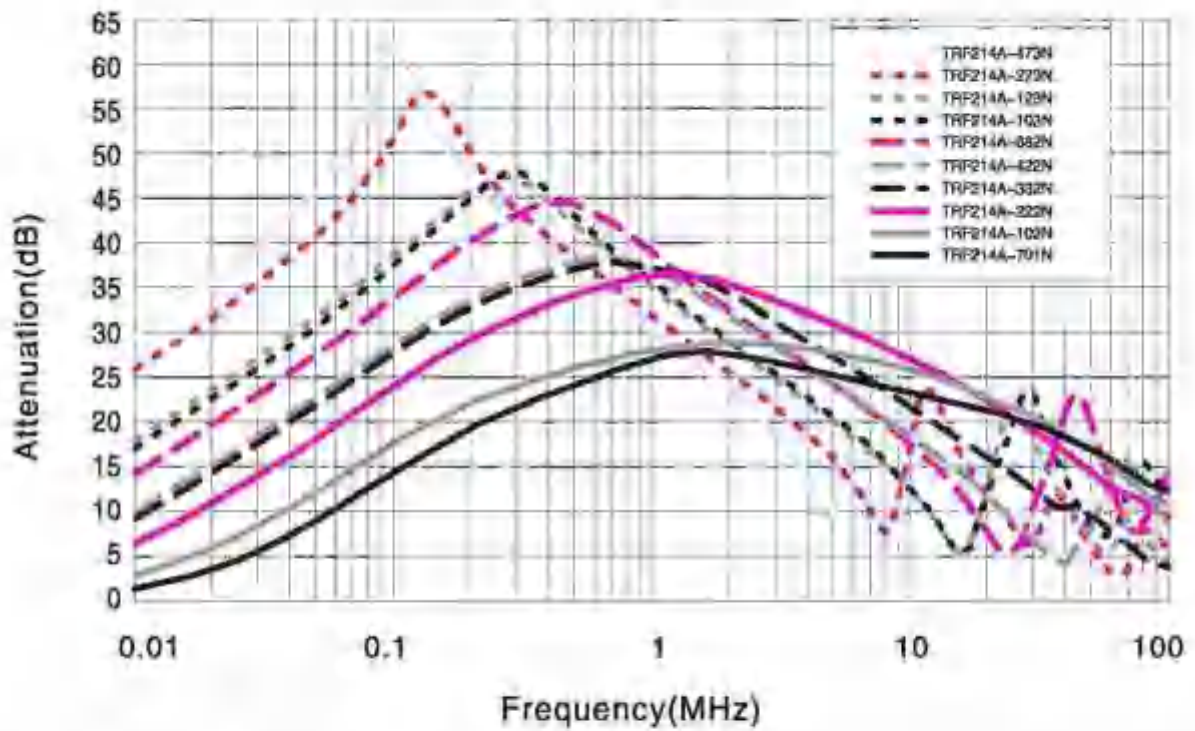
Winding



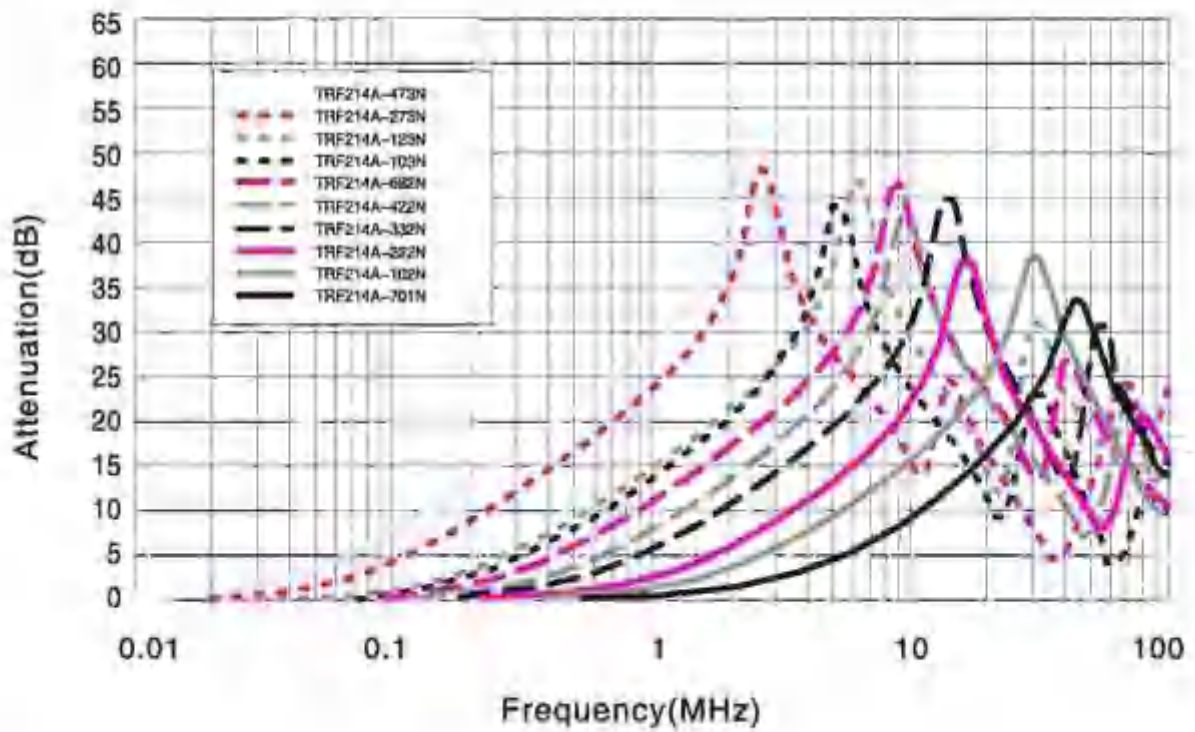
Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-25 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# DOUBLE CORE COMMON MODE POWER LINE CHOKE

## TRF2206VT-D SERIES



### FEATURES:

- MnZn and Ni-ZnCore material
- Suppression of noise in a broad frequency range (100kHz to 100MHz)
- Combined noise and burst filter
- Increases electromagnetic immunity

### APPLICATIONS:

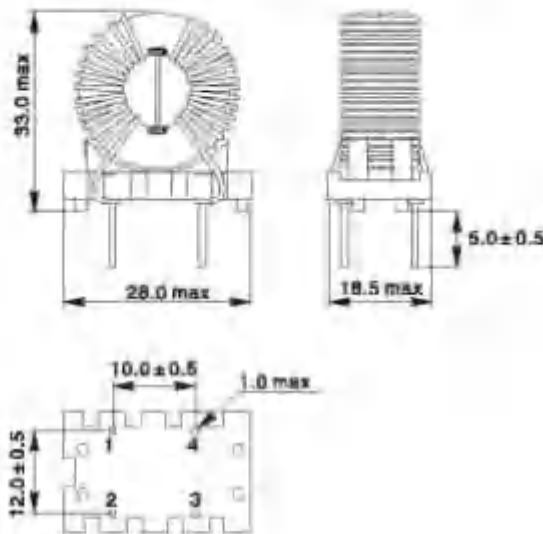
- Power electronics
- EMC filter
- Mains line filter
- Interference suppression in motors
- Common mode filters

### ELECTRICAL CHARACTERISTICS:

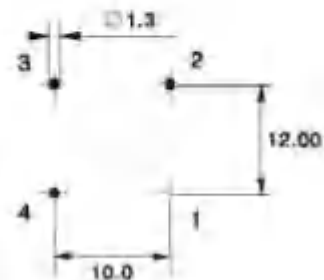
Part Number	L (μH)	Rated Current (A)	RDC max. (mΩ)	Rated voltage (Vac)
TRF2206VT-D-470Y	47	15	4.6	250
TRF2206VT-D-101Y	100	14	6	250
TRF2206VT-D-221Y	220	12	9	250
TRF2206VT-D-471Y	470	9	16	250
TRF2206VT-D-102Y	1000	4.5	42	250

### PHYSICAL CHARACTERISTICS:

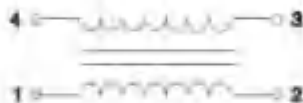
Dimensions 1



Hole pattern (in mm)



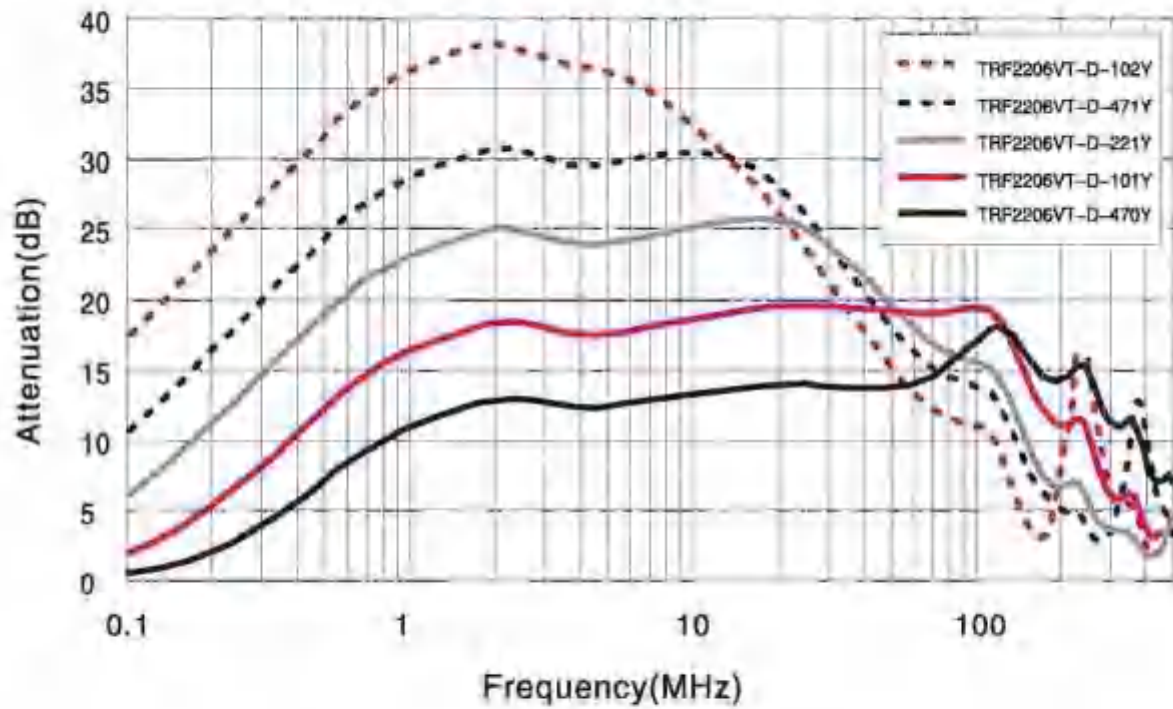
### Winding



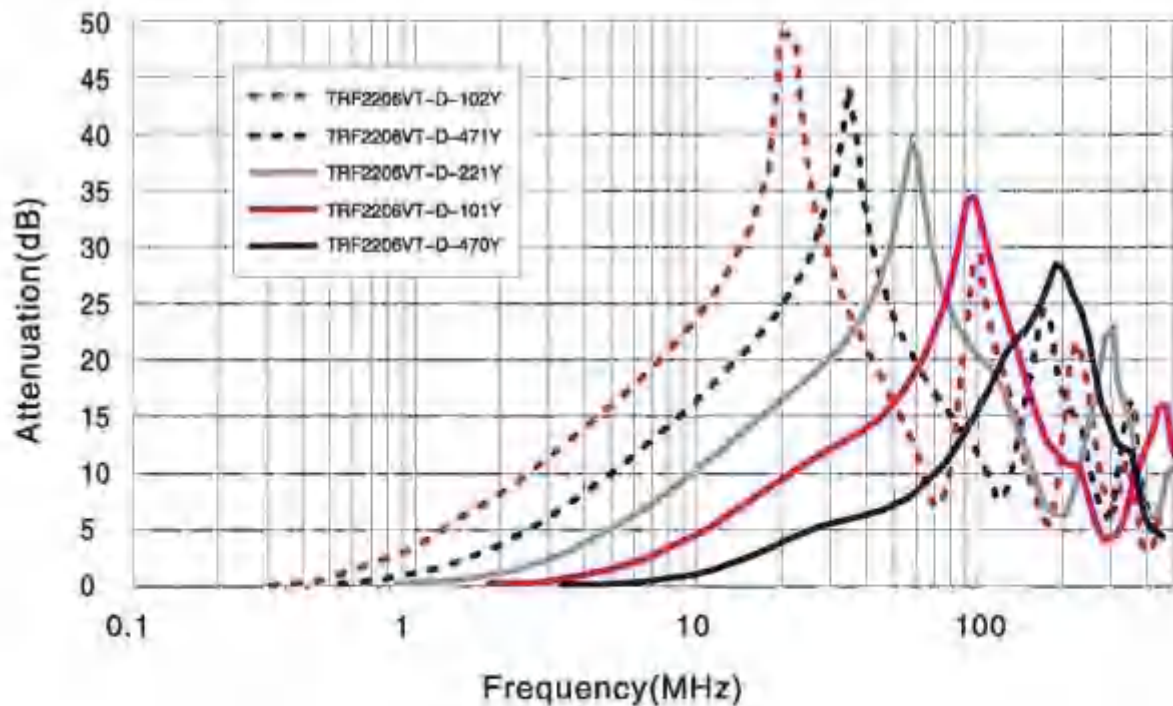
### Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	1500V
Operating temperature.....	-40 °C to +125 °C
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF2208VT SERIES



### FEATURES:

- With this product you can achieve high suppression of asymmetric interferences even at low frequency ranges
- Broadband filtering because of low capacitance winding technique
- Very compact design
- Highest possible current with small sizes
- High interference compression asymmetric interference rates also at low frequency range

### APPLICATIONS:

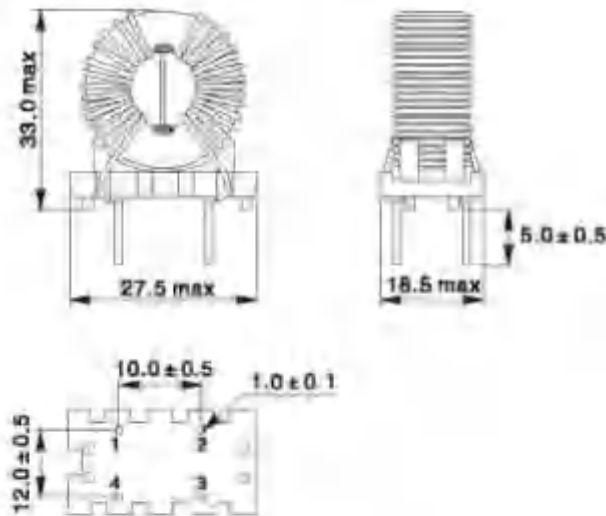
- Power electronics
- Suppression for common mode noise
- Radio interference suppression in motors
- Power line input and output filter

### ELECTRICAL CHARACTERISTICS:

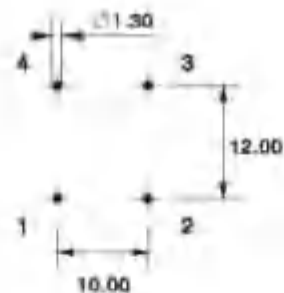
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF2208VT-102N	1.0	±30	10	7
TRF2208VT-222N	2.2		6	20
TRF2208VT-332N	3.3		4	35
TRF2208VT-103N	10.0		3	105
TRF2208VT-203N	20.0		2	220

### PHYSICAL CHARACTERISTICS:

Dimensions 1



Hole pattern(in mm)



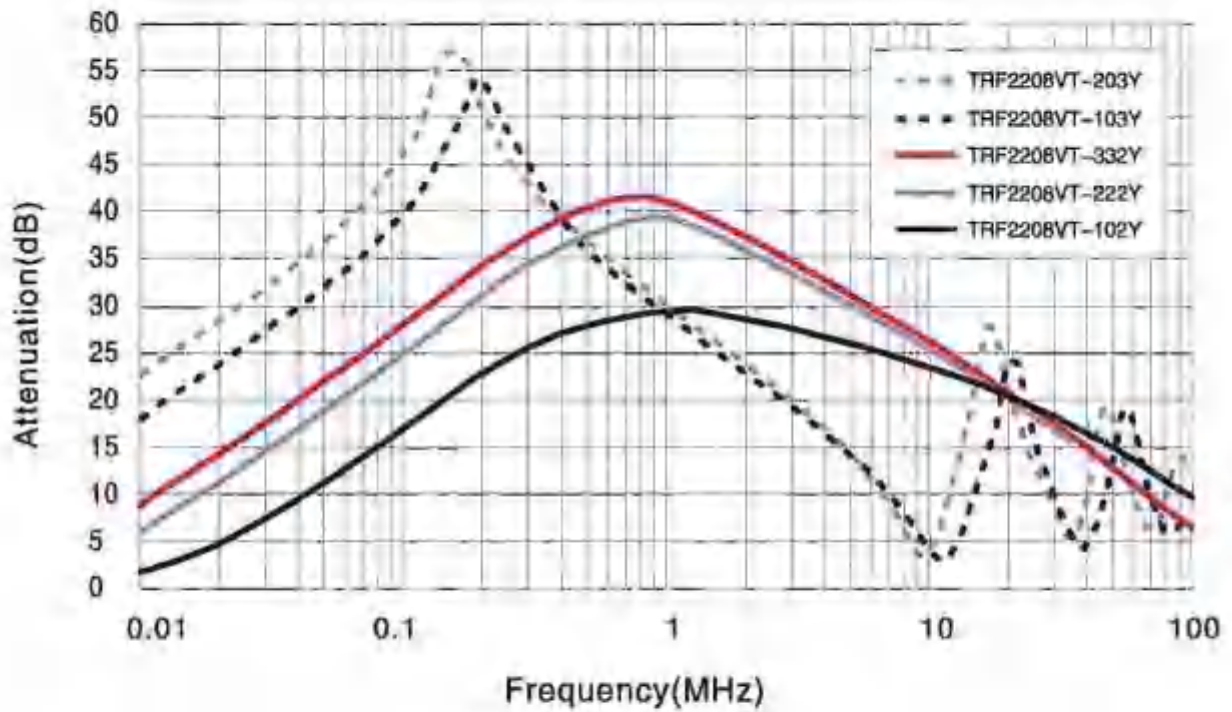
### Winding



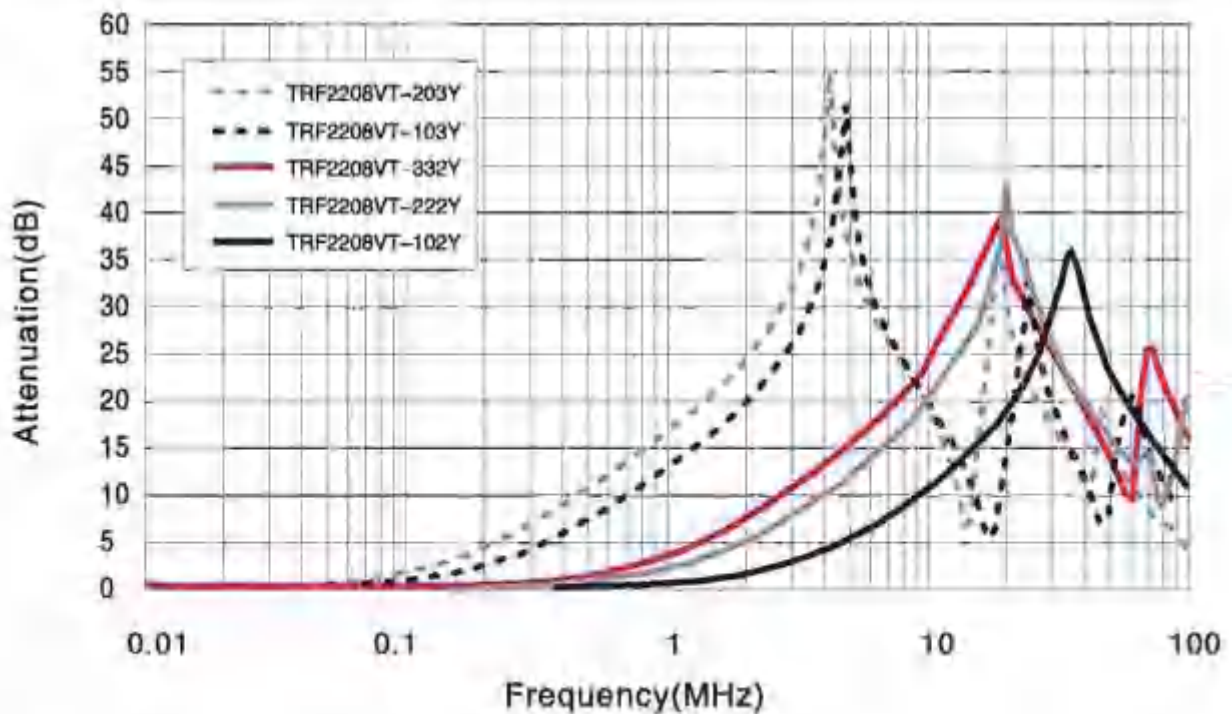
### Notes:

Rated voltage	250Vac
Frequency	50/60Hz
Insulation test voltage	1500V
Operating temperature	-40 °C to +125 °C
Housing	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE TRF222A SERIES



## FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core choke with sector winding
- High interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

## APPLICATIONS:

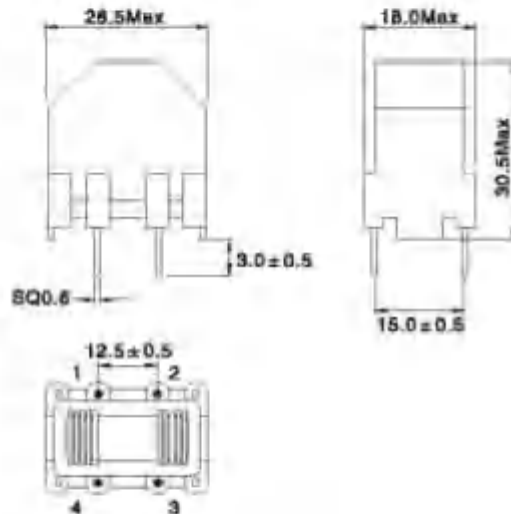
- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

## ELECTRICAL CHARACTERISTICS:

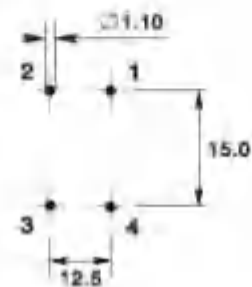
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
TRF222A-182N	1.8	±30	6.0	0.023
TRF222A-272N	2.7		3.0	0.06
TRF222A-402N	4.0		3.0	0.07
TRF222A-882N	8.8		1.9	0.16
TRF222A-103N	10		1.9	0.16
TRF222A-273N	27		1.0	0.64
TRF222A-333N	33		0.8	0.65
TRF222A-503N	50		0.6	1.2

## PHYSICAL CHARACTERISTICS:

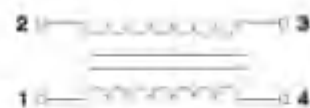
Dimensions 1



Hole pattern (in mm)



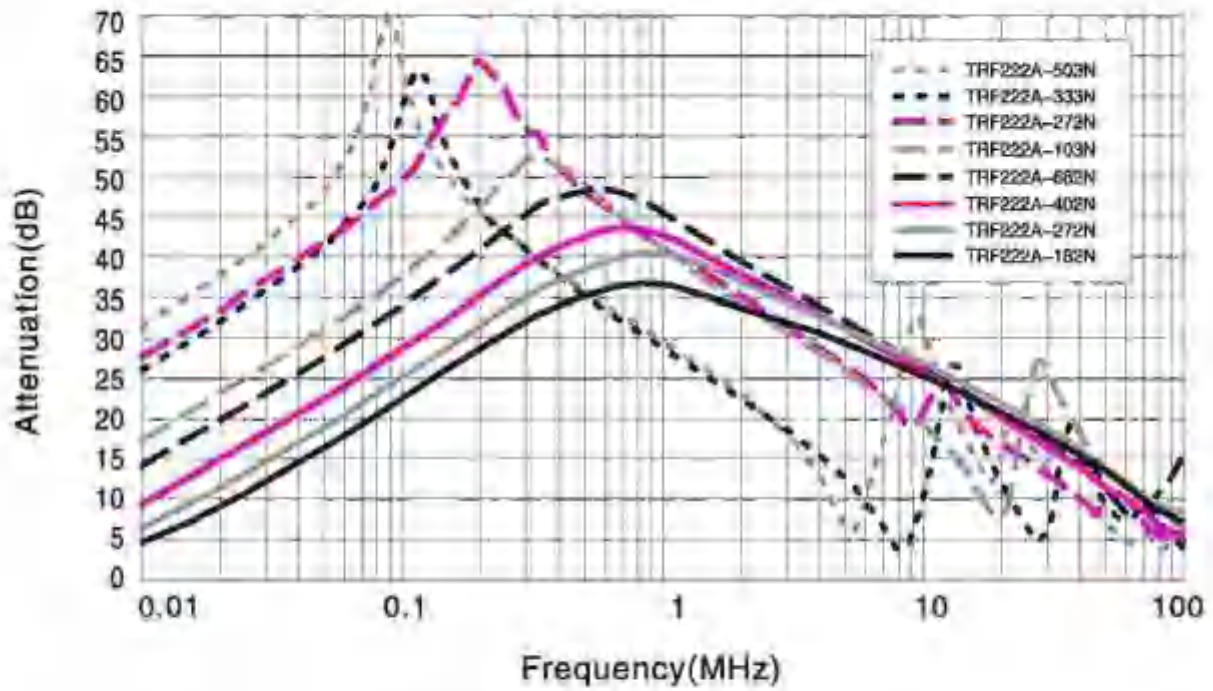
Winding



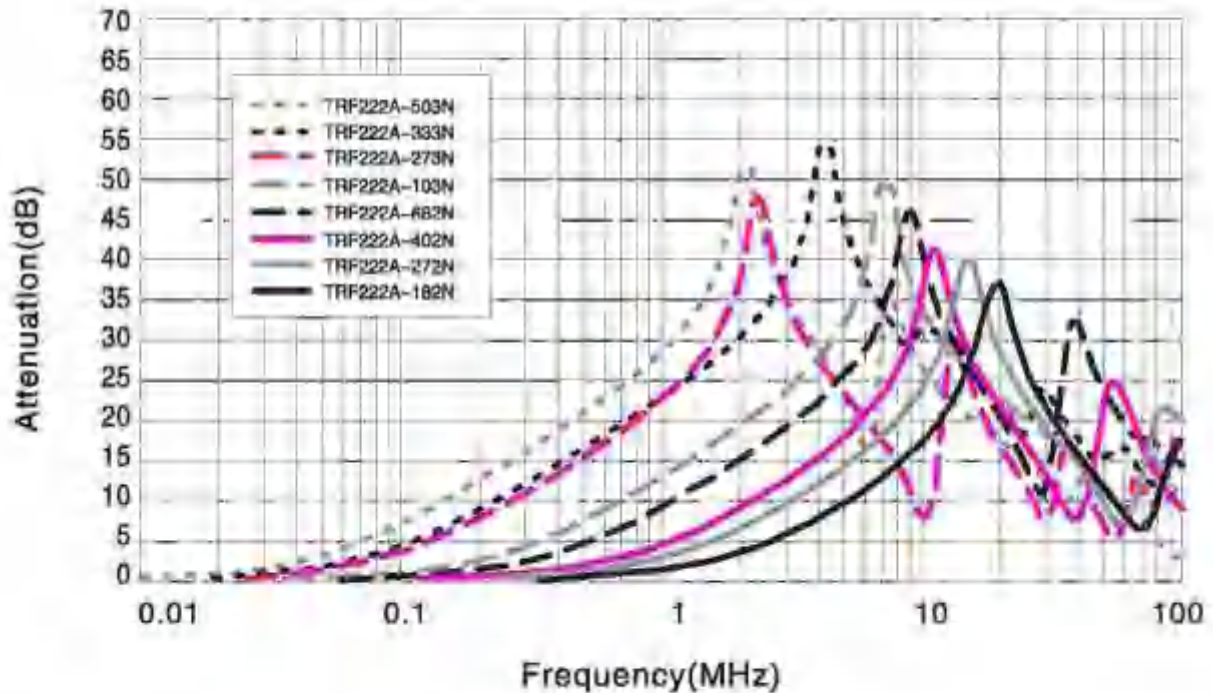
Notes:

Rated voltage.....	250V <sub>ac</sub>
Frequency.....	50/60Hz
Insulation test voltage.....	1500V
Operating temperature.....	-25 °C to +125 °C
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF246A SERIES



### FEATURES:

- Easy assembly due to 4 pole housing
- Compact, small size
- 4 soldering pins for perfect mechanical decoupling
- Toroidal core choke with sector winding
- High interference suppression for common mode interferences in low and middle frequency ranges
- Low stray field

### APPLICATIONS:

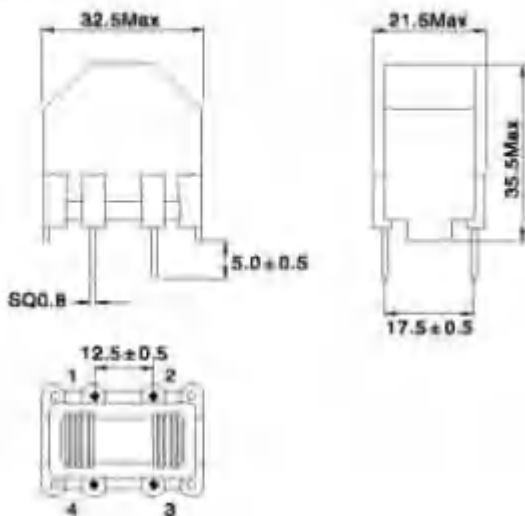
- Power electronics
- SMPS
- Power line filter
- Suppression for common mode noise

### ELECTRICAL CHARACTERISTICS:

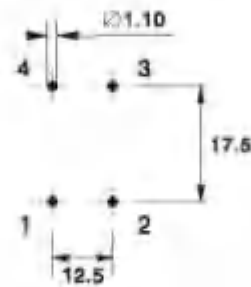
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (Ω)
TRF246A-222N	2.2	± 30	4.3	0.038
TRF246A-332N	3.3		4.0	0.065
TRF246A-682N	6.8		2.5	0.12

### PHYSICAL CHARACTERISTICS:

Dimensions 1



Hole pattern(In mm)



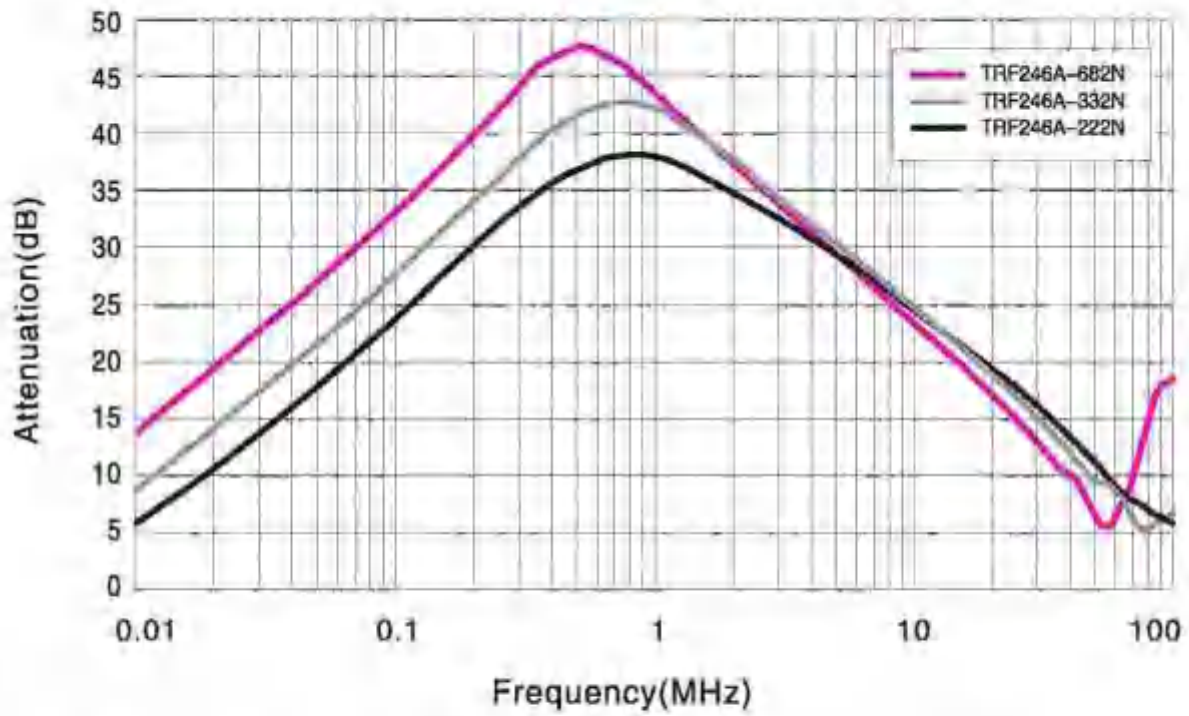
Winding



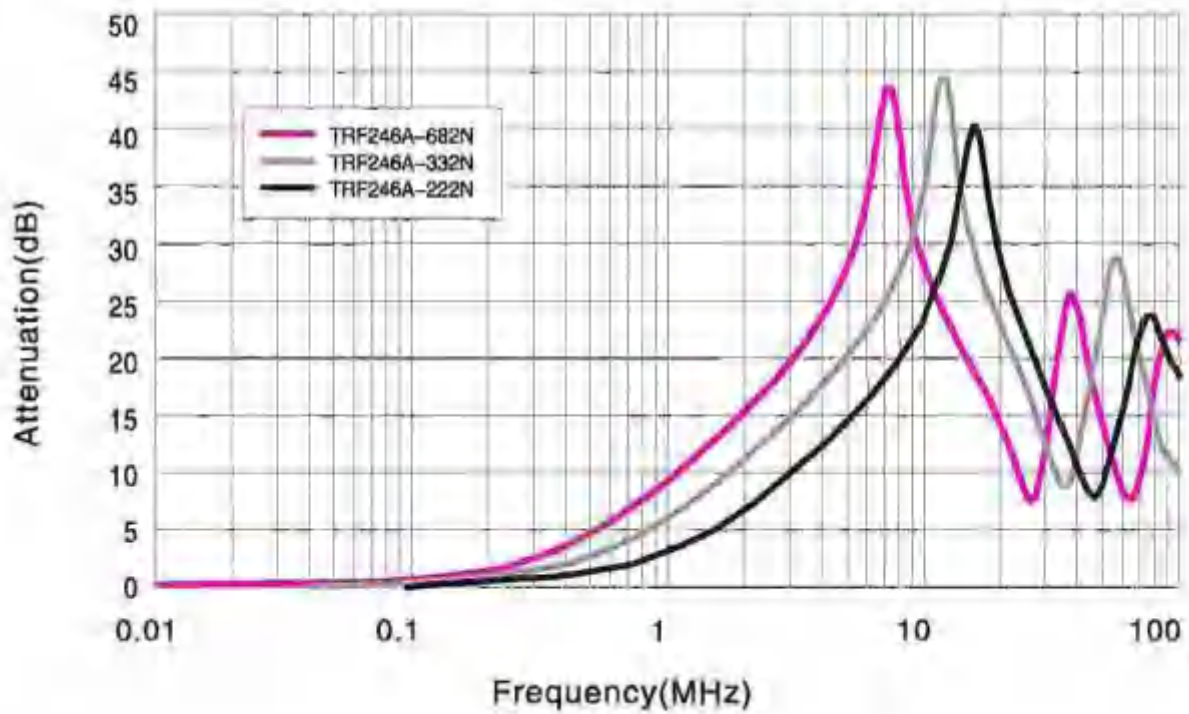
**Notes:**

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	1500V
Operating temperature.....	-25 °C to +125 °C
Housing.....	ULB4 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE TRF2512VT SERIES



## FEATURES:

- With this product you can achieve high suppression of asymmetric interferences even at low frequency ranges
- Broadband filtering because of low capacitance winding technique
- Very compact design
- Highest possible current with small sizes
- High interference compression asymmetric interference rates also at low frequency range

## APPLICATIONS:

- Power electronics
- Suppression for common mode noise
- Radio interference suppression in motors
- Power line input and output filter

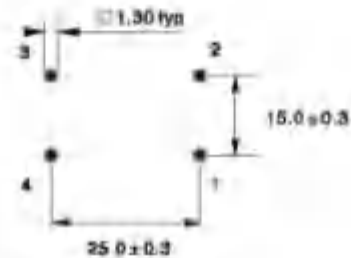
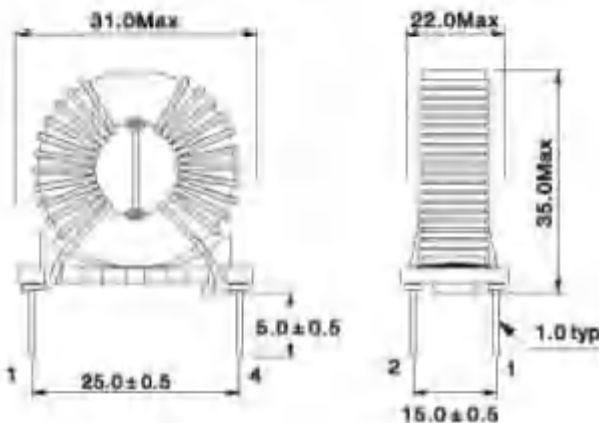
## ELECTRICAL CHARACTERISTICS:

Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max (mΩ)
TRF2512VT-102N	1.0	± 30	12	9
TRF2512VT-222N	2.2		8	14
TRF2512VT-332N	3.3		6	25
TRF2512VT-502N	5.0		6	45
TRF2512VT-103N	10.0		5	55
TRF2512VT-203N	20.0		3	160
TRF2512VT-333N	33.0		3	210

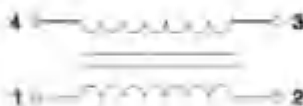
## PHYSICAL CHARACTERISTICS:

Dimensions 1

Hole pattern (in mm)



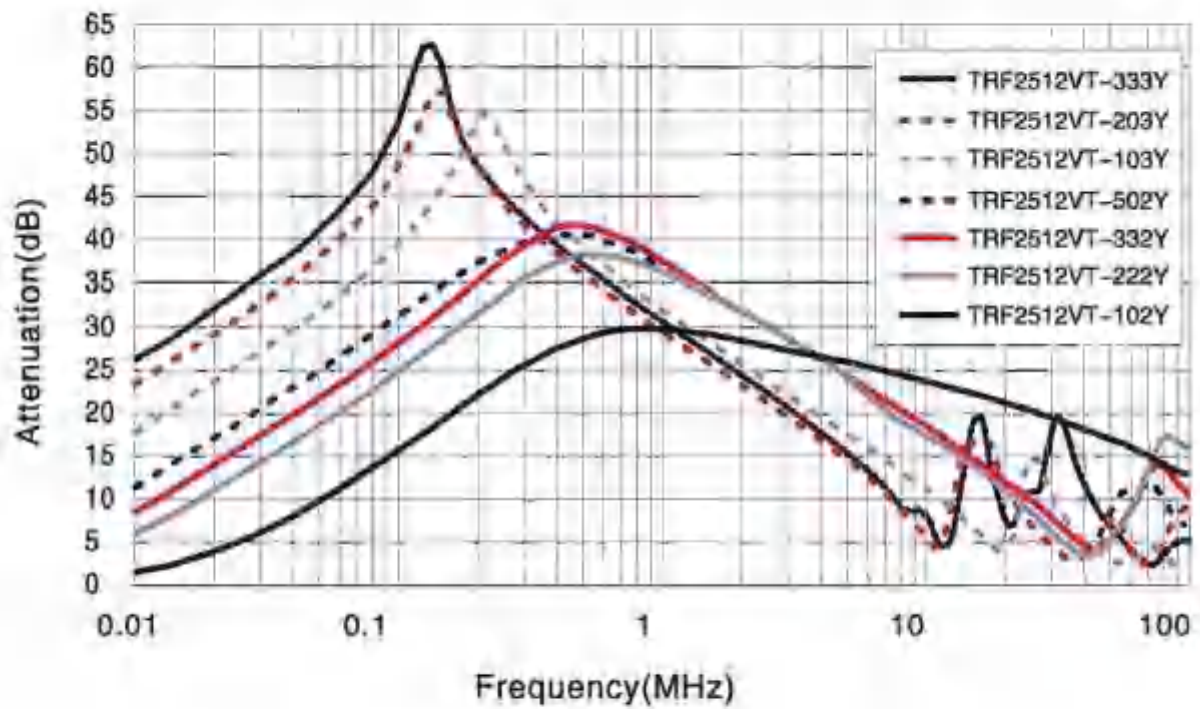
## Winding



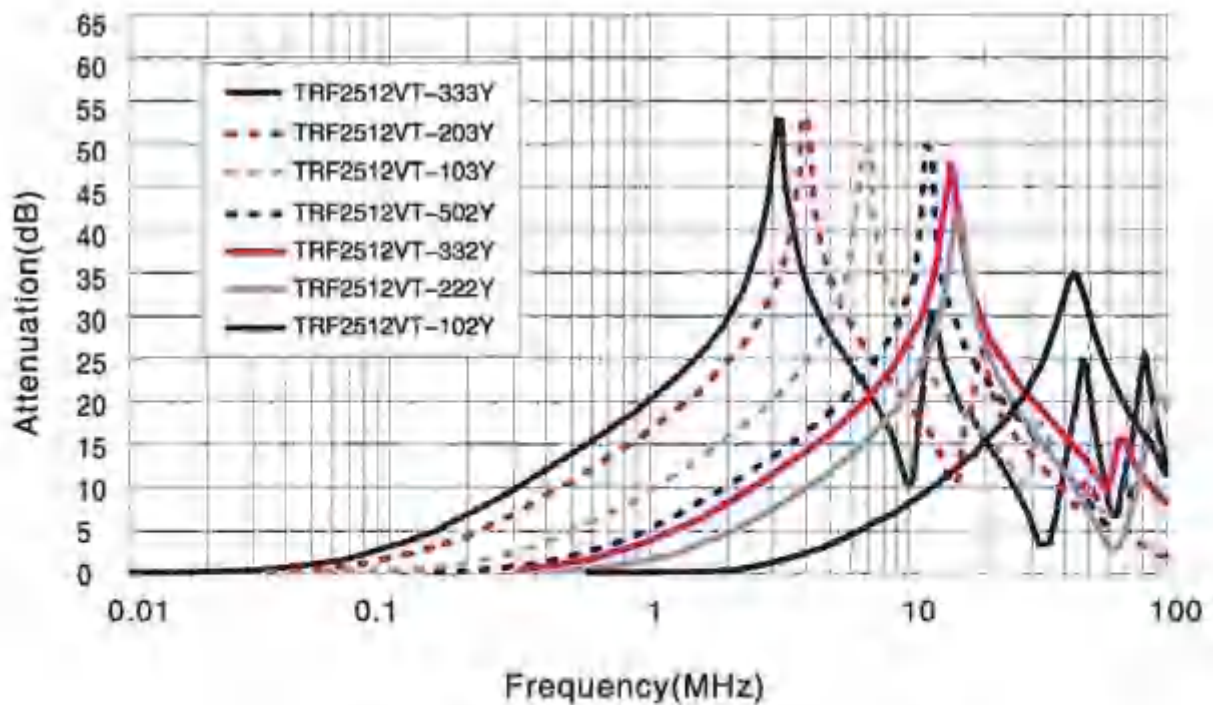
## Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF3015VT SEIRES



### FEATURES:

- Very high permeability nanocrystalline core material
- Improved isolation through plastic case and winding spacer
- High and stable inductance values at high temperatures
- High rated currents
- Broadband suppression
- Small size

### APPLICATIONS:

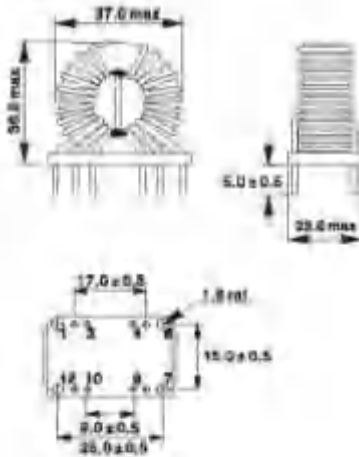
- Power electronics
- Power line in- and output filter
- Suppression for common mode noise
- Radio interference suppression in motors

### ELECTRICAL CHARACTERISTICS:

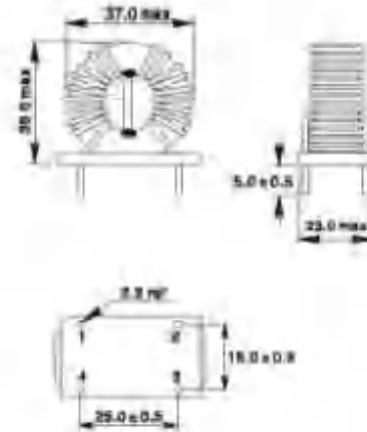
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)	Dimensions
TRF3015VT-001Y	0.9	-30 to +60	32	1.1	1
TRF3015VT-252Y	2.5		25	2.2	2
TRF3015VT-302Y	3.0		23	3.0	2
TRF3015VT-452Y	4.5		18	4.2	2
TRF3015VT-123Y	12		10	15	2
TRF3015VT-303Y	30		5	46	2
TRF3015VT-903Y	90		3.5	110	3
TRF3015VT-193Y	190		2.0	310	3

### PHYSICAL CHARACTERISTICS:

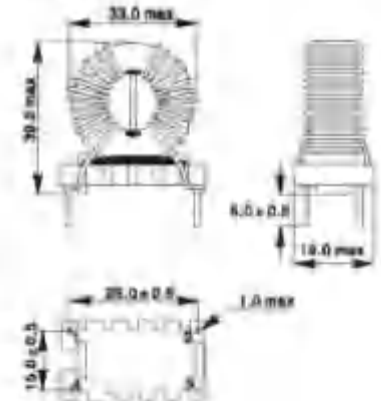
Dimensions 1



Dimensions 2



Dimensions 3



### Winding

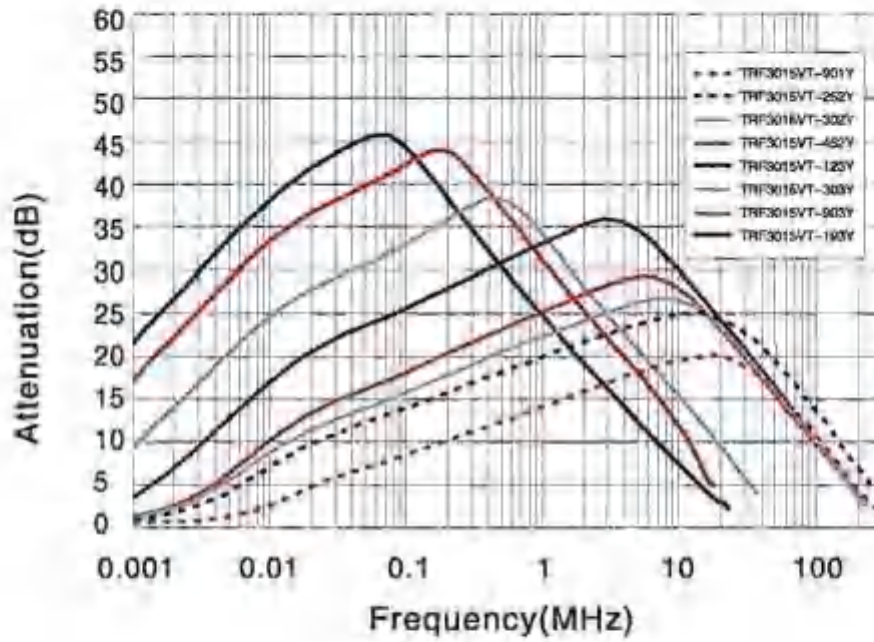


### Notes:

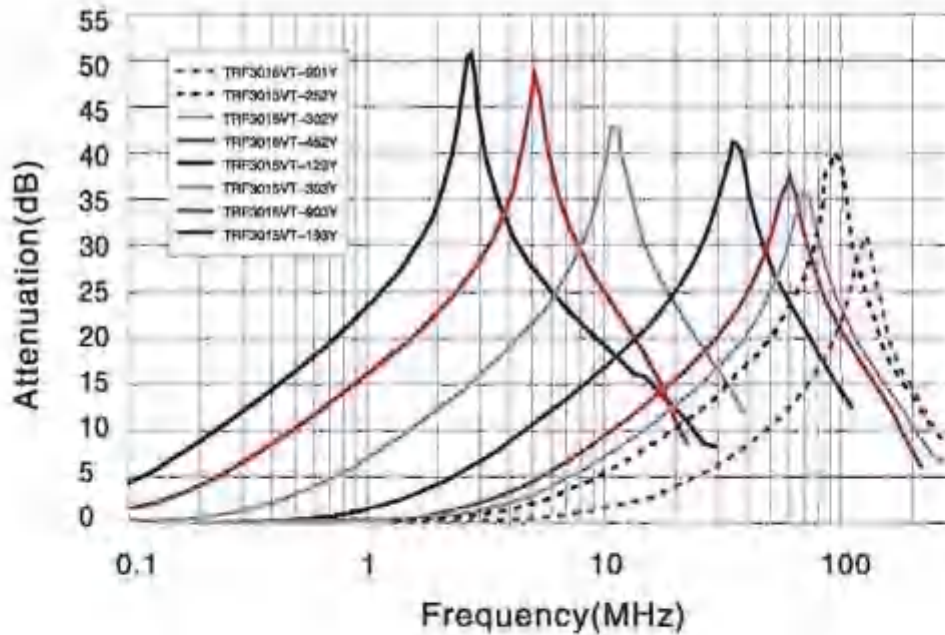
- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0



### INSERTION LOSS COMMON MODE



### INSERTION LOSS DIFFERENTIAL MODE



# THROUGH-HOLE TOROIDAL COMMON MODE CHOKES TRF3518 SERIES



## FEATURES:

- 1.5A to 15A ratings
- 1.0mH to 16mH dual choices
- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

## COMMON APPLICATIONS:

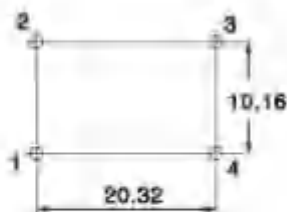
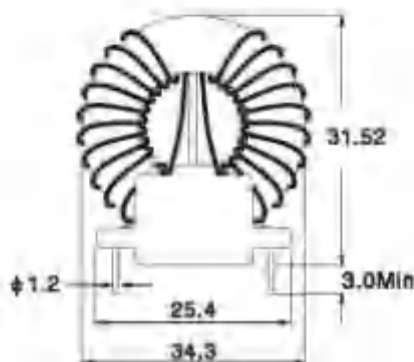
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Computer Peripheral Equipment It accord with the standards of FCC VCCI CISPR FTZ,etc, eliminating of electromagnetic noise of power and signal circuit.

## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH Min.) 10KHz,0.1V	Rated Current Amps	DCR each winding (Ohms Max)	Leakage Inductance ( $\mu$ H) Type
TRF3518-163Y	16.0	1.5	0.320	180
TRF3518-103Y	10.0	2.2	0.240	130
TRF3518-802Y	8.0	2.5	0.120	90
TRF3518-402Y	4.0	3.5	0.040	45
TRF3518-302Y	3.0	6.0	0.030	35
TRF3518-202Y	2.0	9.0	0.020	25
TRF3518-102Y	1.0	15.0	0.010	12

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

### DIMENSIONS IN:mm



- Inductance tolerance in +50% -30%
  - Max operating voltage:250V at 40°C
  - IDC Max: rating AC/DC current A @40°C
  - Hi-Pot 2500Vac: winding to winding 3S.
  - Inductance Testing: 10KHz 0.1V HP4284A
  - RDC:QuadTech 1680 Milliohmmeter
  - Surge current Max 10ms: 20X IDC
  - Operating temperature: -40°C to +105°C
  - Storage Temperature: -40°C to +105°C
  - Resistance to soldering heat:260°C for 10 seconds
  - Marking: Part number and date code
- Note:All specifications subject to change without notice.

# THROUGH-HOLE TOROIDAL COMMON MODE CHOKES TRF3518A SERIES

## FEATURES:

- Excellent Mechanical Strength
- High Reliability and varied Plastic base
- Low resistance and temperature rise
- UL1446 Class B (130°C) Insulation System

## COMMON APPLICATIONS:

- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDP Televisions
- Eliminating of electromagnetic noise of power and signal circuit.

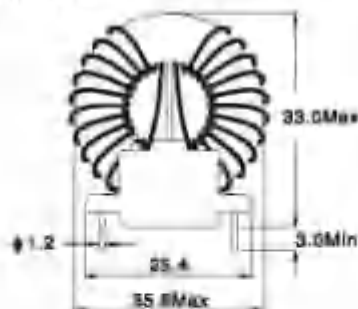


## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH Min.) 15.75kHz, 0.1V	Rated Current Amps	DCR each winding (mΩ Max)	Leakage Inductance (μH Max)	Lead diameter mm
TRF3518A-502Y-1A	5.0	1.0	207	80	1.37
TRF3518A-802Y-1A	8.0	1.0	270	123	1.37
TRF3518A-153Y-1A	15.0	1.0	430	233	1.37
TRF3518A-252Y-2A	2.5	2.0	90	42	1.37
TRF3518A-402Y-2A	4.0	2.0	95	70	1.37
TRF3518A-762Y-2A	7.6	2.0	108	74	1.37
TRF3518A-132Y-4A	1.3	4.0	29	20	1.37
TRF3518A-212Y-4A	2.1	4.0	40	36	1.37
TRF3518A-372Y-4A	3.7	4.0	36	40	1.37
TRF3518A-102Y-6A	1.0	6.0	22	16	1.37
TRF3518A-172Y-6A	1.7	6.0	32	34	1.37
TRF3518A-302Y-6A	3.0	6.0	27	36	1.37
TRF3518A-601Y-9A	0.6	9.0	12	11	1.07
TRF3518A-112Y-9A	1.1	9.0	13	12	1.07
TRF3518A-192Y-9A	1.9	9.0	17	20	1.07
TRF3518A-601Y-12A	0.6	12.0	8	9	1.22
TRF3518A-801Y-12A	0.8	12.0	8	9	1.22
TRF3518A-142Y-12A	1.4	12.0	11	16	1.22
TRF3518A-301Y-15A	0.3	15.0	5	6	1.37
TRF3518A-801Y-15A	0.6	15.0	6	6.5	1.37
TRF3518A-112Y-15A	1.1	15.0	8	13.7	1.37

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

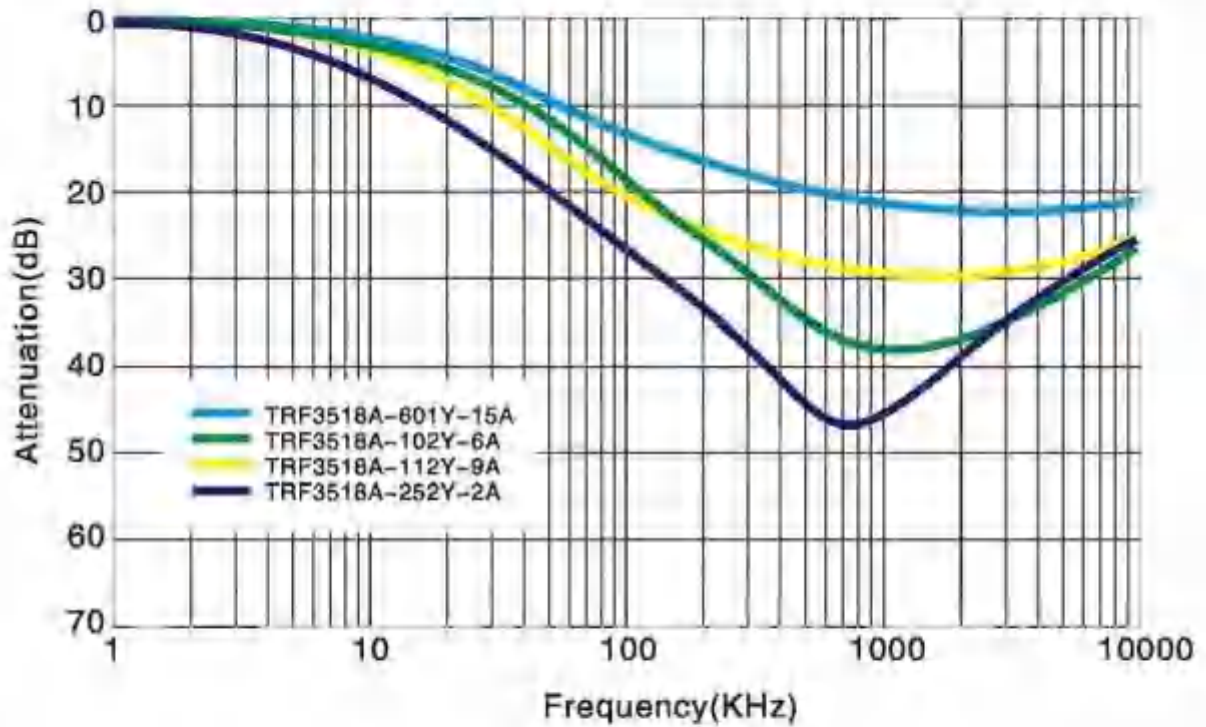
### DIMENSIONS IN: mm



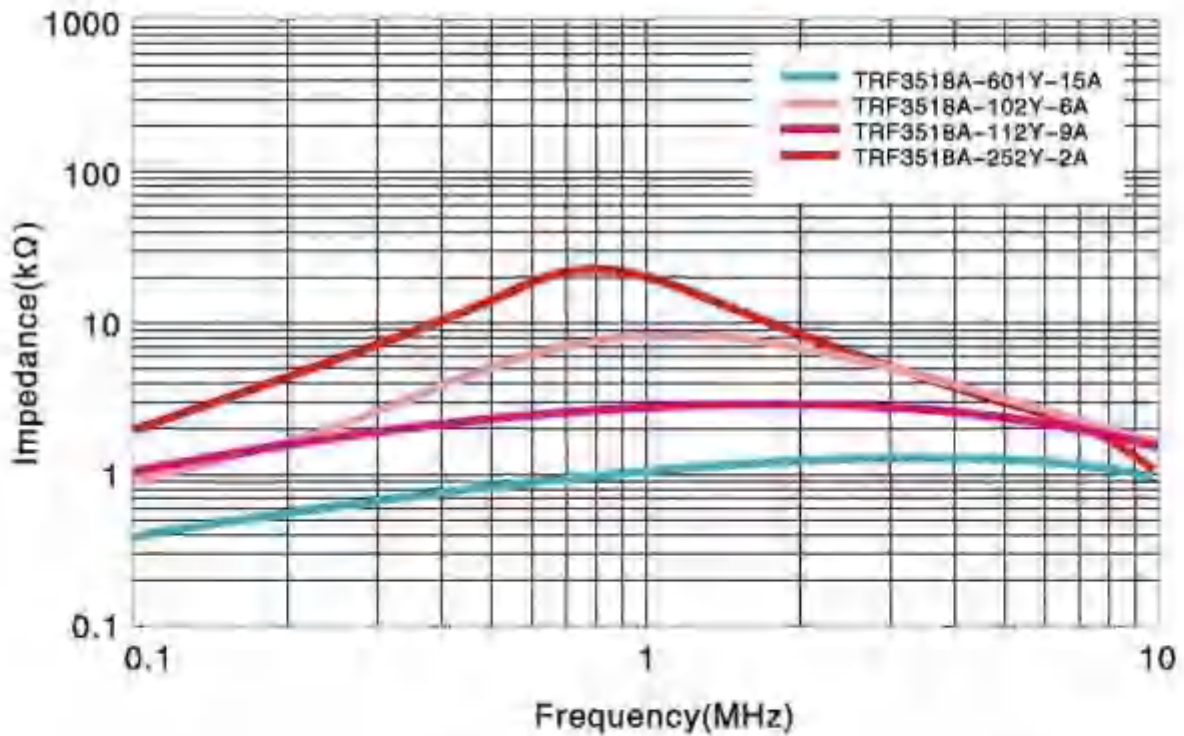
- Max operating voltage: 250V at 40°C
- IDC Max: rating AC/DC current A @ 40°C
- Hi-Pot 1500Vac winding to winding 3S
- Inductance Testing: 15.75kHz 0.1V HP4264A
- RDC: QuadTech 1680 Milliohmeter
- Surge current Max 10ms: 20X IDC
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Part number and date code

Note: All specifications subject to change without notice.

### Typical Common Mode Attenuation:



### Typical Impedance:



# THROUGH-HOLE TOROIDAL COMMON MODE CHOKES TRF3622 SERIES

## FEATURES:

- 2.2A to 15A ratings.
- 1.2mH to 16mH dual chokes
- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

## COMMON APPLICATIONS:

- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDP Televisions
- Computer Peripheral Equipment in accord with the standards of FCC VCCI CISPR FTZ, etc., eliminating of electromagnetic noise of power and signal circuit.

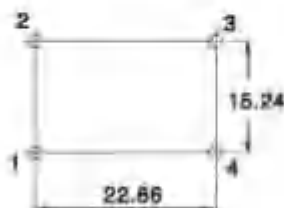
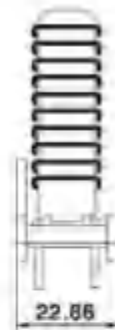
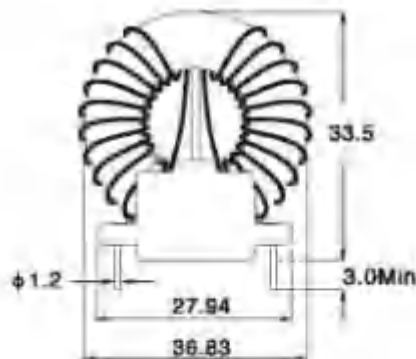


## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH Min.) 10KHz,0.1V	Rated Current Amps	DCR each winding (Ohms Max)	Leakage Inductance (μH) Type
TRF3622-163Y	16.0	2.2	0.40	180
TRF3622-103Y	10.0	3.0	0.35	130
TRF3622-802Y	8.0	3.5	0.143	85
TRF3622-402Y	4.0	5.4	0.105	45
TRF3622-302Y	3.0	6.5	0.054	35
TRF3622-202Y	2.0	8.7	0.020	25
TRF3622-122Y	1.2	15	0.010	12

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

### DIMENSIONS IN:mm



- Inductance tolerance:  $\pm 50\%$  -  $30\%$
  - Max operating voltage: 250V at 40°C
  - IDC Max: rating AC/DC current A @ 40°C
  - Hi-Pot 2500Vac winding to winding 3S.
  - Inductance Tasting: 10KHz 0.1V HP4294A
  - RDC: QuadTech 1860 Milliohmmeter
  - Surge current Max 10ms: 20X IDC
  - Operating temperature: -40°C to +105°C
  - Storage Temperature: -40°C to +105°C
  - Resistance to soldering heat: 250°C for 10 seconds
  - Marking: Part number and date code
- Note: All specifications subject to change without notice.

# THROUGH-HOLE TOROIDAL COMMON MODE CHOKES TRF3622A SERIES

## FEATURES:

- Excellent Mechanical Strength
- High Reliability and varied Plastic base
- Low resistance and temperature rise
- UL1448 Class B (130°C) Insulation System

## COMMON APPLICATIONS:

- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PCPTelevisions
- Eliminating of electromagnetic noise of power and signal circuit.

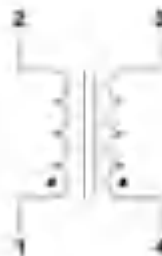
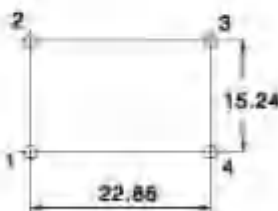
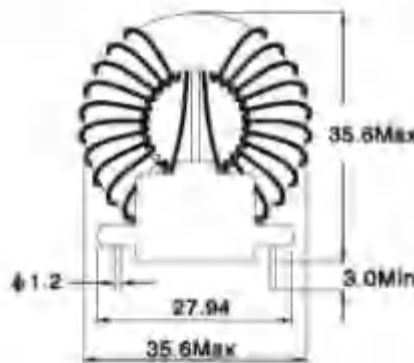


## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH Min.) 15.75kHz,0.1V	Rated Current Amps	DCR each winding (mΩ Max)	Leakage inductance (uH) Max	Lead diameter nom
TRF3622A-752Y-1A	7.5	1	270	90	1.37
TRF3622A-133Y-1A	13	1	415	190	1.37
TRF3622A-382Y-2A	3.8	2	108	48	1.37
TRF3622A-662Y-2A	6.3	2	145	98	1.37
TRF3622A-192Y-4A	1.9	4	38	26	1.37
TRF3622A-332Y-4A	3.3	4	55	45	1.37
TRF3622A-152Y-8A	1.5	8	29	21	1.37
TRF3622A-362Y-8A	2.6	8	40	41	1.37
TRF3622A-901Y-9A	0.9	9	14	17	1.07
TRF3622A-152Y-9A	1.5	9	15	15	1.07
TRF3622A-701Y-12A	0.7	12	11	14	1.22
TRF3622A-122Y-12A	1.2	12	11	14	1.22
TRF3622A-501Y-15A	0.5	15	7	8.7	1.37
TRF3622A-401Y-15A	0.4	15	7	10	1.37

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

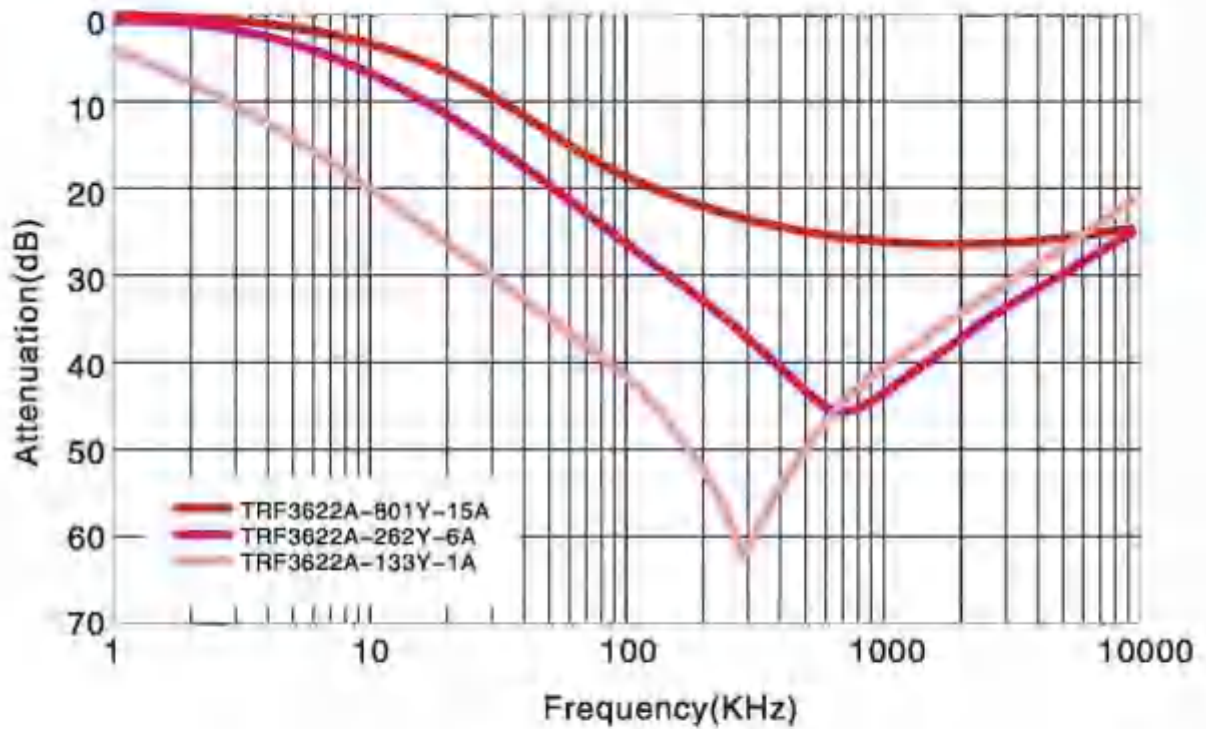
### DIMENSIONS IN:mm



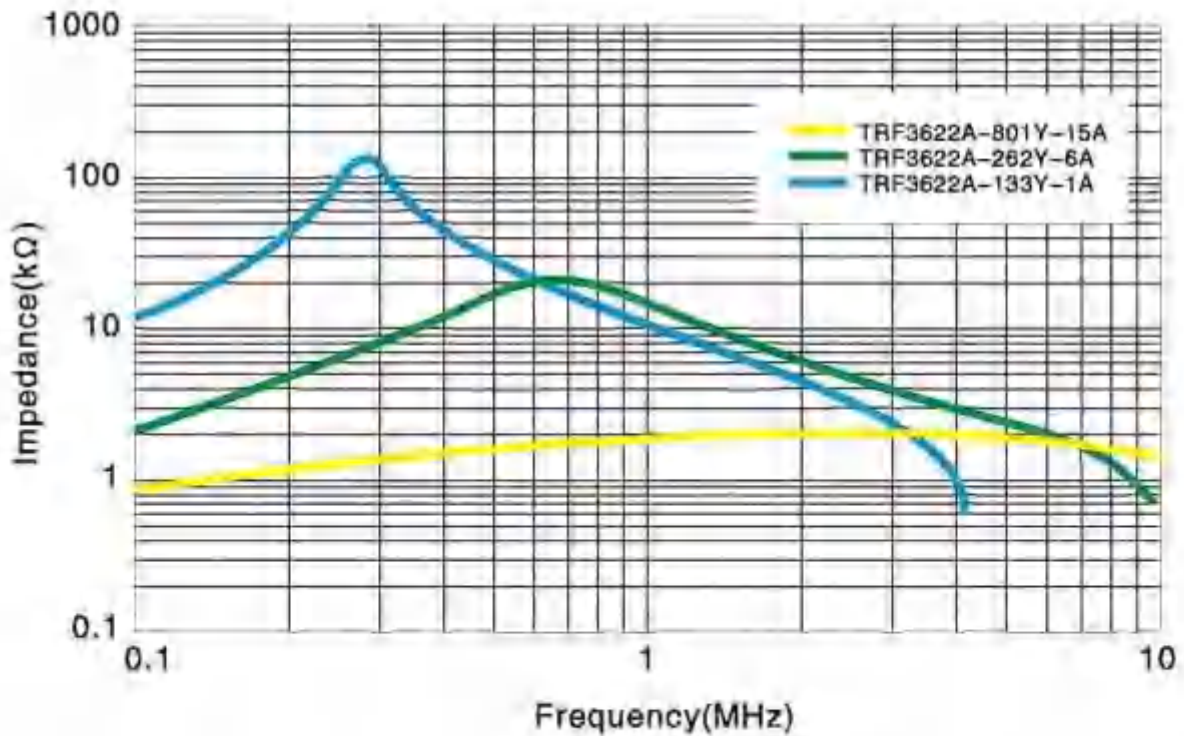
- Max operating voltage:250V at 40°C
- IDC Max: rating AC/DC current A @ 40°C
- Hi-Pot 1500Vac winding to winding 3S
- Inductance Testing: 15.75kHz 0.1V HP4284A
- RDC:QuadTech 1880 Milliohmmeter
- Surge current Max 10ms: 20X IDC
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Resistance to soldering heat:260°C for 10 seconds
- Marking: Part number and date code

Note:All specifications subject to change without notice

### Typical Common Mode Attenuation:



### Typical Impedance:



# COMMON MODE POWER LINE CHOKE

## TRF4015VT Series



### FEATURES:

- Very high permeability nanocrystalline core material
- Improved isolation through plastic case and winding spacer
- High and stable inductance values at high temperatures
- High rated currents
- Broadband suppression
- Small size

### APPLICATIONS:

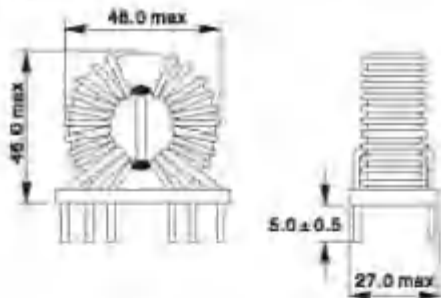
- Power electronics
- Power line in- and output filter
- Suppression for common mode noise
- Radio interference suppression in motors

### ELECTRICAL CHARACTERISTICS:

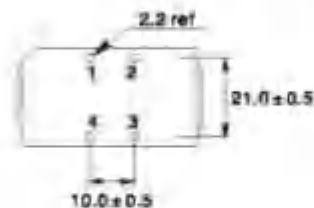
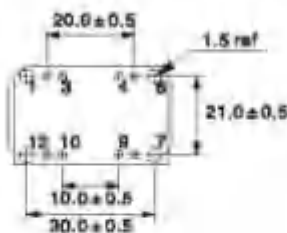
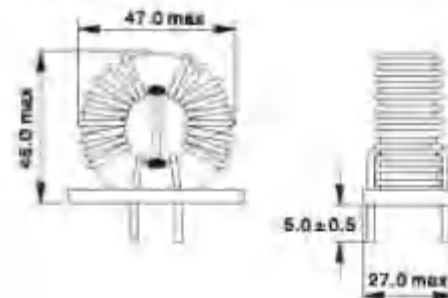
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)	Dimensions
TRF4015VT-152Y	1.5	-30 to +50	38	2.3	1
TRF4015VT-302Y	3		26	4.5	2
TRF4015VT-502Y	5		21	6.5	2
TRF4015VT-702Y	7		15	9.5	2
TRF4015VT-902Y	9		13	15	2
TRF4015VT-143Y	14		8	27	2
TRF4015VT-203Y	20		6	45	2
TRF4015VT-353Y	35		5	90	2

### PHYSICAL CHARACTERISTICS:

Dimensions 1



Dimensions 2



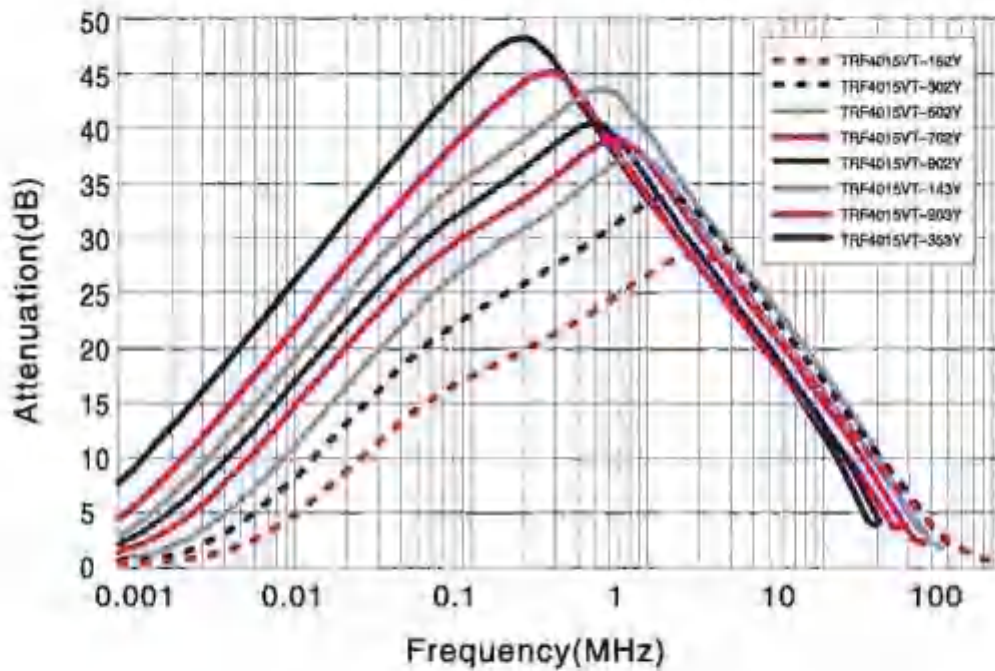
### Winding



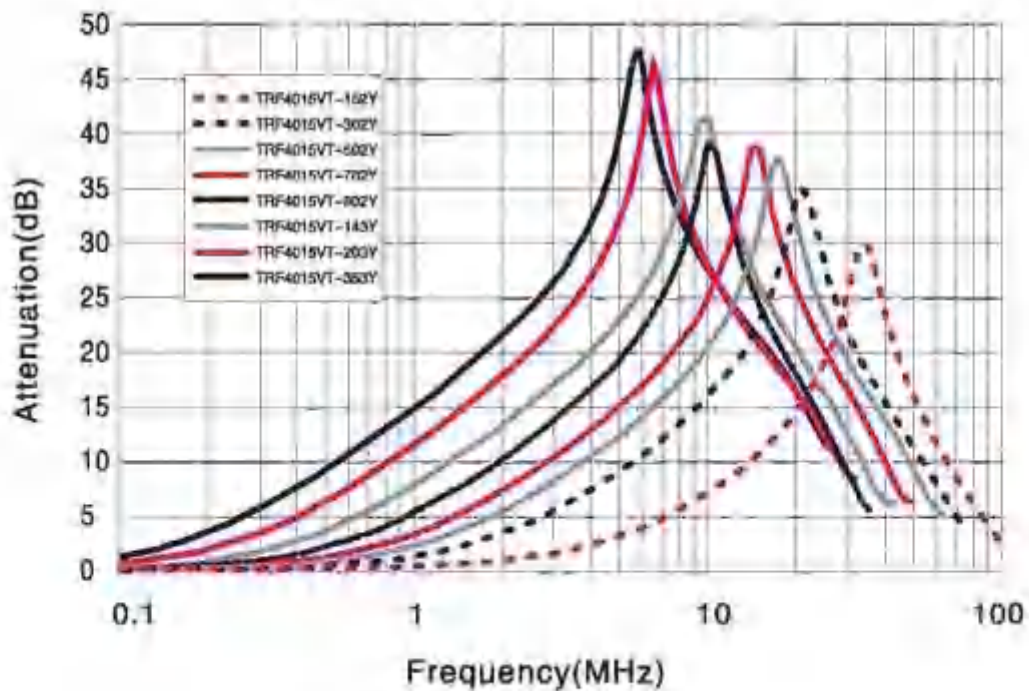
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-40 °C to +125 °C
- Housing.....UL94 V-0

### INSERTION LOSS COMMON MODE



### INSERTION LOSS DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## TRF4016VT SERIES



### FEATURES:

- With this product you can achieve high suppression of asymmetric interferences even at low frequency ranges
- Broadband filtering because of low capacitance winding technique
- Very compact design
- Highest possible current with small sizes
- High interference compression asymmetric interference rates also at low frequency range

### APPLICATIONS:

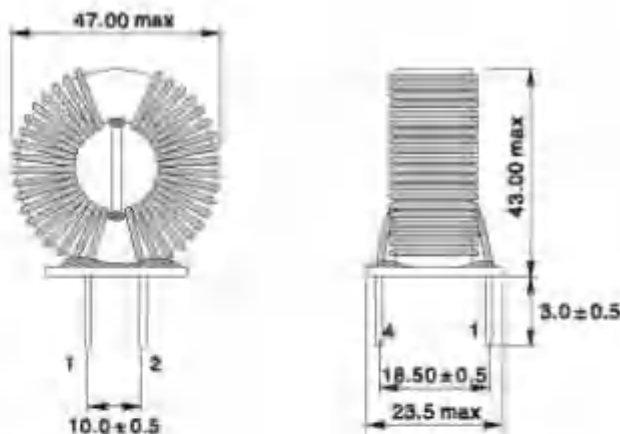
- Power electronics
- Suppression for common mode noise
- Radio interference suppression in motors
- Power line input and output filter

### ELECTRICAL CHARACTERISTICS:

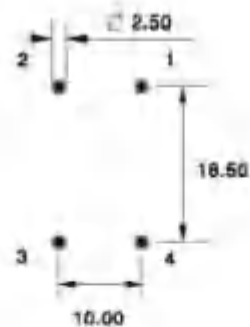
Part Number	L (mH)	Tolerance (%)	Rated Current (A)	RDC max. (mΩ)
TRF4016VT-501N	0.5	± 30	35	2.3
TRF4016VT-102N	1.0		25	4.5
TRF4016VT-132N	1.3		20	6.2
TRF4016VT-182N	1.8		14	9.5

### PHYSICAL CHARACTERISTICS:

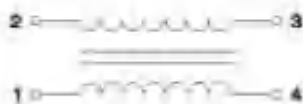
Dimensions 1



Hole pattern (in mm)



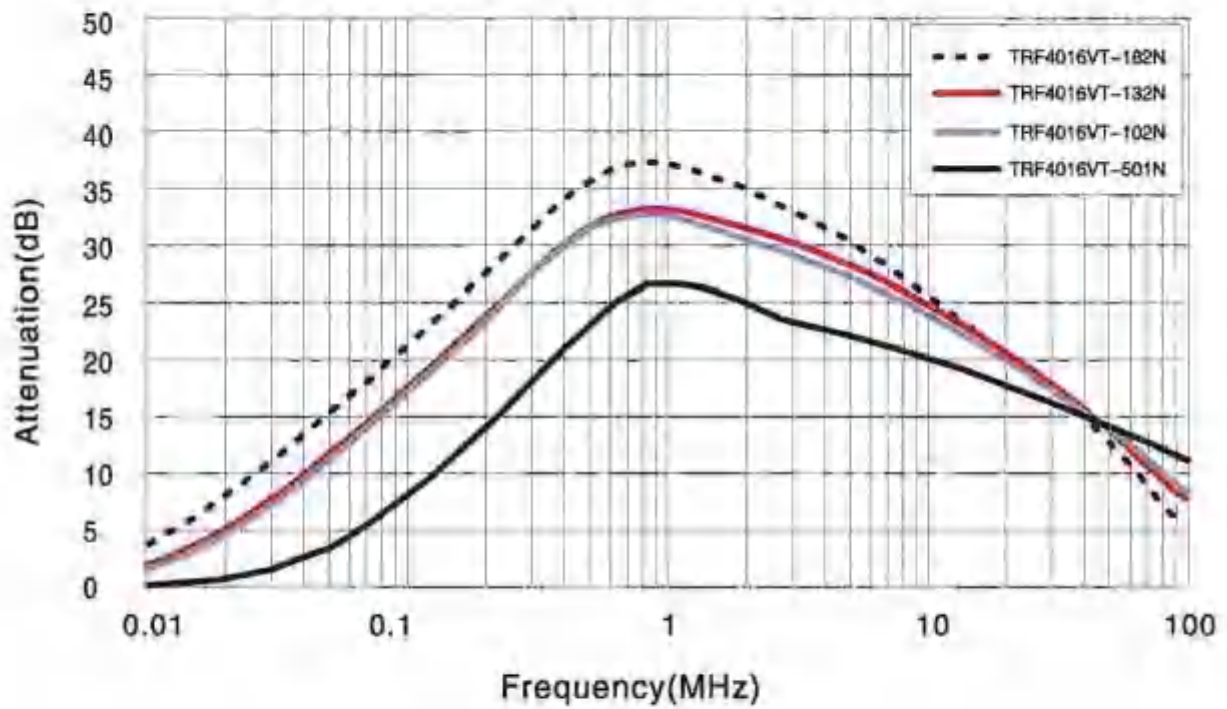
### Winding



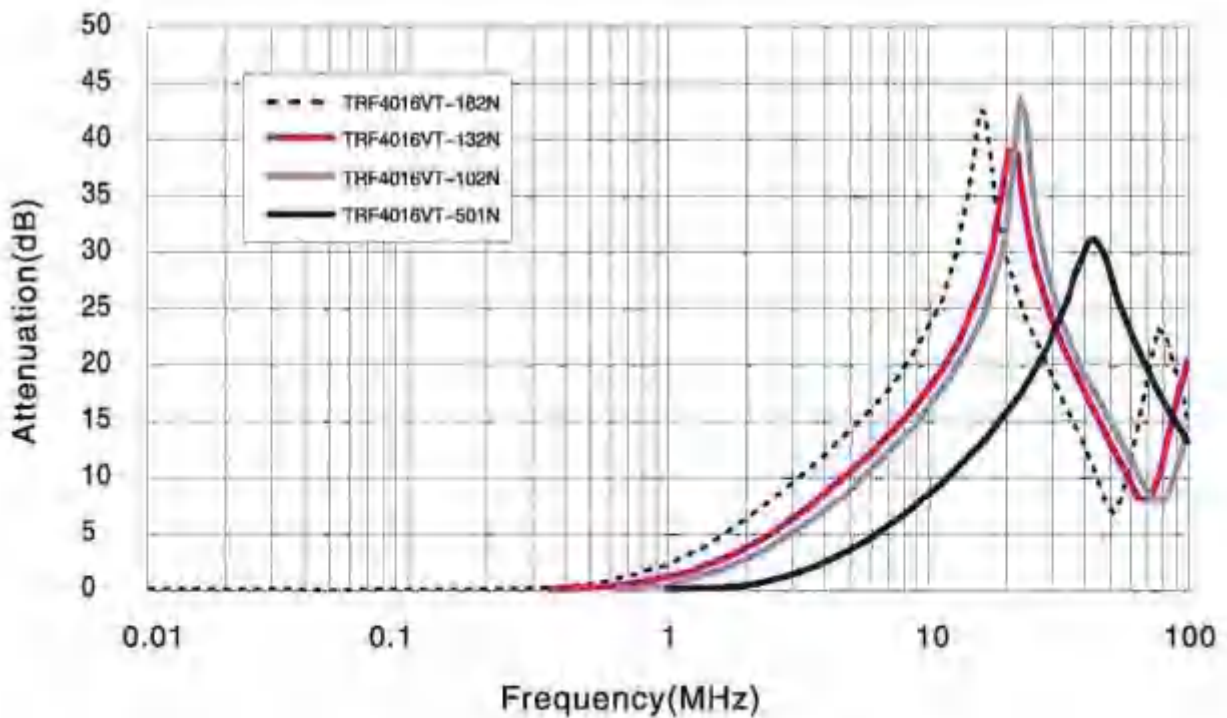
### Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	1500V
Operating temperature.....	-40 °C to +125 °C
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# THROUGH-HOLE TOROIDAL COMMON MODE CHOKES TRF4525 SERIES

## FEATURES:

- 1.8A to 15A ratings
- 3.0mH to 56mH dual choices
- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

## COMMON APPLICATIONS:

- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Computer Peripheral Equipment It accord with the standards of FCC VCCI CISPR FTZ,etc, eliminating of electromagnetic noise of power and signal circuit.

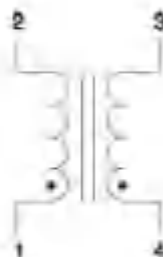
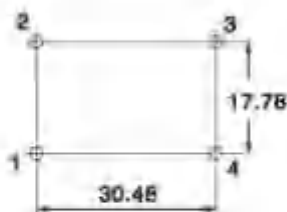
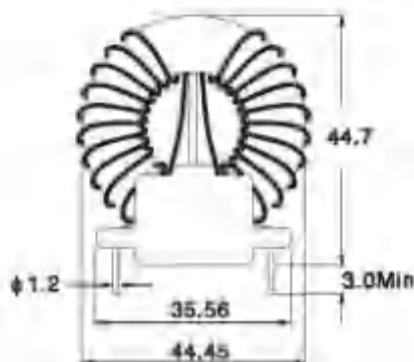


## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH Min.) 10KHz,0.1V	Rated Current Amps	DCR each winding (Ohms Max)	Leakage Inductance ( $\mu$ H) Type
TRF4525-563Y	56.0	1.8	1.0	550
TRF4525-333Y	33.0	2.0	0.730	300
TRF4525-223Y	22.0	3.2	0.352	280
TRF4525-153Y	15.0	4.2	0.132	150
TRF4525-123Y	12.0	6.8	0.098	95
TRF4525-502Y	5.0	12	0.035	50
TRF4525-302Y	3.0	15	0.009	20

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

### DIMENSIONS IN:mm



- Inductance tolerance: in +50% -50%
- Max operating voltage:250V at 40°C
- IDC Max: rating AC/DC current A @40°C
- Hi-Pot 2500Vac winding to winding 3S.
- Inductance Testing: 10KHz 0.1V HP4284A
- RDC:QuadTech 1880 Milliohmmeter
- Surge current Max 10ms: 20X IDC
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Resistance to soldering heat:260°C for 10 seconds
- Marking: Part number and date code

Note:All specifications subject to change without notice.

# THROUGH-HOLE TOROIDAL COMMON MODE CHOKES TRF4525A SERIES



## FEATURES:

- Excellent Mechanical Strength
- High Reliability and varied Plastic base
- Low resistance and temperature rise
- UL1446 Class B (130°C) insulation System

## COMMON APPLICATIONS:

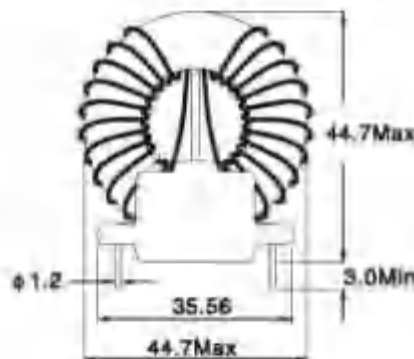
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDP Televisions
- Eliminating of electromagnetic noise of power and signal circuit.

## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (min Min.) 15.75KHz,0.1V	Rated Current Amps	DCR each winding (mΩ Max)	Leakage Inductance (μH) Max	Lead diameter mm
TRF4525A-323Y-1A	32.0	1	650	185	1.37
TRF4525A-563Y-1A	56.0	1	900	780	1.37
TRF4525A-163Y-2A	16.0	2	240	210	1.37
TRF4525A-283Y-2A	28.0	2	330	410	1.37
TRF4525A-802Y-4A	8.0	4	61	57.5	1.27
TRF4525A-143Y-4A	14.0	4	120	180	1.37
TRF4525A-662Y-6A	6.0	6	48	48	1.37
TRF4525A-113Y-6A	11.5	6	89	140	1.37
TRF4525A-402Y-9A	4.0	9	26	37	1.07
TRF4525A-702Y-9A	7.0	9	45	104	1.07
TRF4525A-302Y-12A	3.0	12	22	40	1.22
TRF4525A-522Y-12A	5.2	12	25	57	1.22
TRF4525A-252Y-15A	2.5	15	19	42	1.27
TRF4525A-442Y-15A	4.4	15	17	48	1.37

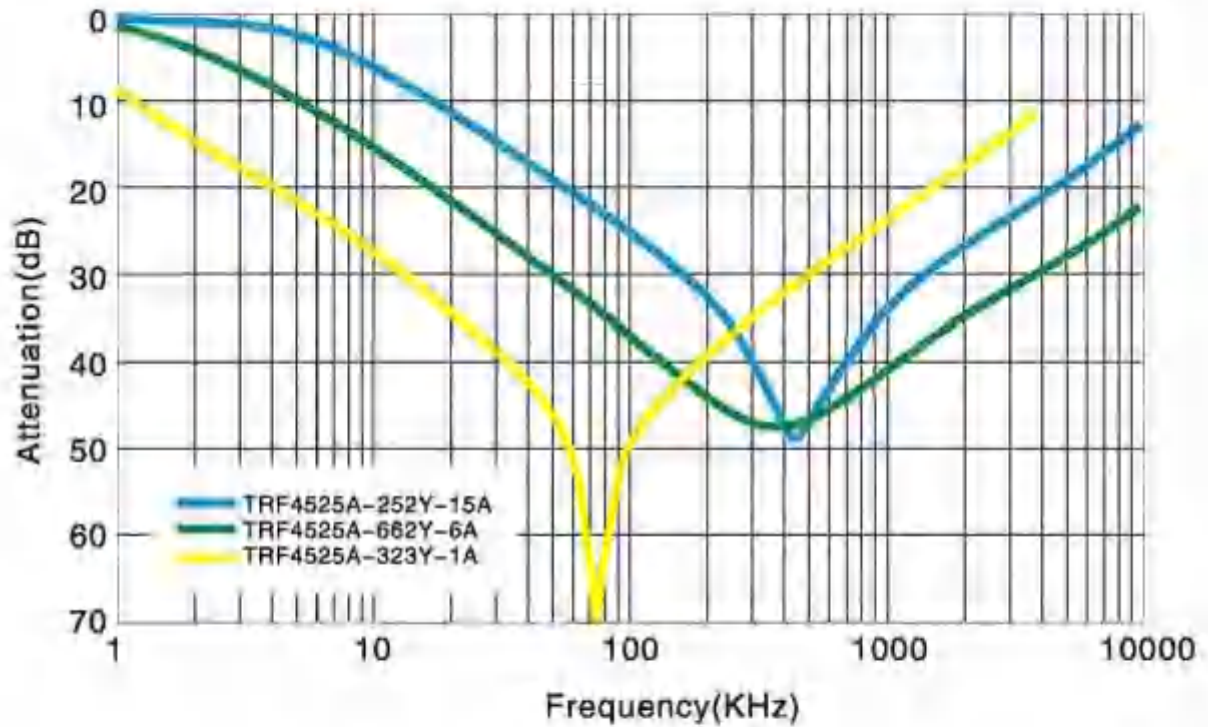
## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

### DIMENSIONS IN:mm

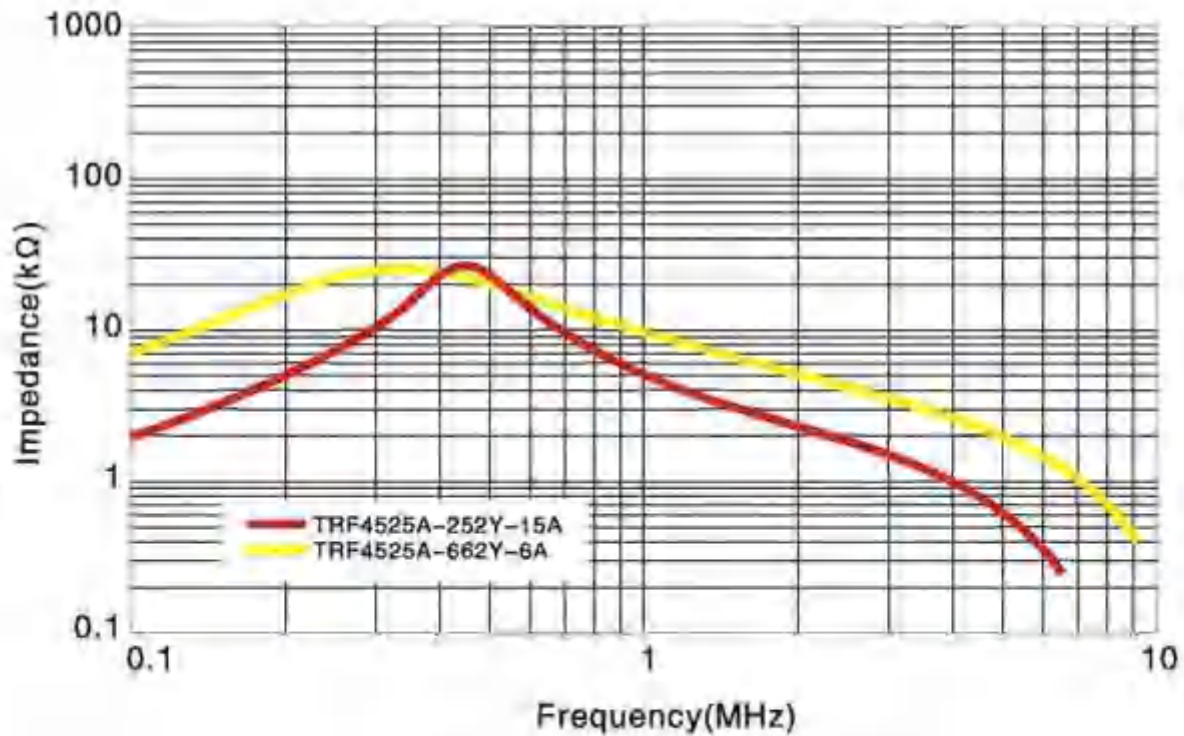


- Max operating voltage:250V at 40°C
  - IDC Max: rating AC/DC current A @40°C
  - Hi-Pot 1500Vac winding to winding 3S
  - Inductance Testing: 15.75KHz 0.1V HP4284A
  - RDC:QuadTech 1880 Milliohmeter
  - Surge current Max 10ms: 20X IDC
  - Operating temperature: -40°C to +105°C
  - Storage Temperature: -40°C to +105°C
  - Resistance in soldering heat:250°C for 10 seconds
  - Marking: Part number and date code
- Note:All specifications subject to change without notice.

### Typical Common Mode Attenuation:



### Typical Impedance:



# THROUGH-HOLE TOROIDAL COMMON MODE CHOKES TRF5230 SERIES

## FEATURES:

- 1.5A to 18A ratings
- 6.0mH to 120mH dual choices
- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

## COMMON APPLICATIONS:

- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDP Televisions
- Computer Peripheral Equipment It accord with the standards of FCC VCCI CISPR FTZ, etc., eliminating of electromagnetic noise of power and signal circuit.

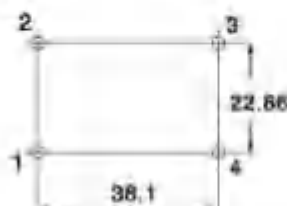
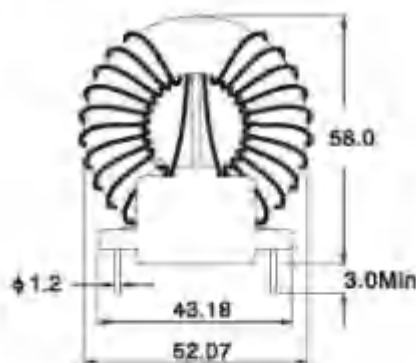


## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH Min.) 10KHz, 0.1V	Rated Current Amps	DCR each winding (Ohms Max)	Leakage inductance (μH) Type
TRF5230-124Y	120.0	1.5	1.15	900
TRF5230-723Y	72.0	2.6	0.50	600
TRF5230-333Y	33.0	4.2	0.124	450
TRF5230-223Y	22.0	6.0	0.117	180
TRF5230-153Y	15.0	9.0	0.060	180
TRF5230-103Y	10.0	15	0.033	120
TRF5230-602Y	6.0	18	0.028	100

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

### DIMENSIONS (in: mm)



- Inductance tolerance in +50% -30%
- Max operating voltage: 250V at 40°C
- IDC Max: rating AC/DC current A @ 40°C
- Hi-Pot 2500Vac winding to winding 3S.
- Inductance Tasting: 10KHz 0.1V HP4284A
- RDC: QuadTech 1680 Milliohmeter
- Surge current Max 10ms; 20X IDC
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Part number and date code

Note: All specifications subject to change without notice.

# THROUGH-HOLE TOROIDAL COMMON MODE CHOKES TRF5230A SERIES



## FEATURES:

- Excellent Mechanical Strength
- High Reliability and varied Phase beam
- Low resistance and temperature rise
- UL1448 Class B (130°C) insulation System

## COMMON APPLICATIONS:

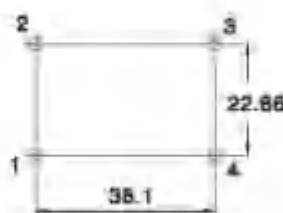
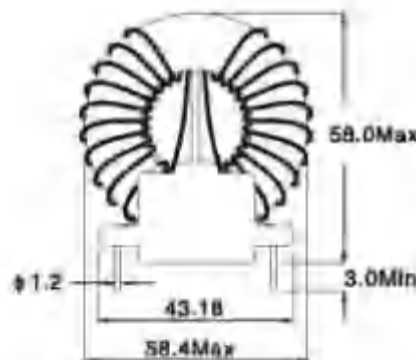
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Eliminating of electromagnetic noise of power and signal circuit.

## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH Min.) 15.75KHz,0.1V	Rated Current Amps	DCR each winding (mΩ Max)	Leakage Inductance (μH) Max	Lead diameter (mm)
TRF5230A-723Y-1A	72	1	1150	1400	1.37
TRF5230A-124Y-1A	125	1	1150	1400	1.37
TRF5230A-363Y-2A	36	2	415	680	1.57
TRF5230A-823Y-2A	82	2	415	750	1.37
TRF5230A-163Y-4A	19	4	150	350	1.27
TRF5230A-323Y-4A	32	4	158	376	1.27
TRF5230A-153Y-6A	15	6	114	275	1.37
TRF5230A-763Y-6A	26	6	119	320	1.37
TRF5230A-103Y-9A	10	9	57	190	1.07
TRF5230A-173Y-9A	17	9	62	220	1.07
TRF5230A-752Y-12A	7.5	12	42	140	1.22
TRF5230A-132Y-12A	13	12	49	155	1.22
TRF5230A-802Y-15A	8	15	30	111	1.37
TRF5230A-102Y-15A	10	15	28	122	1.37

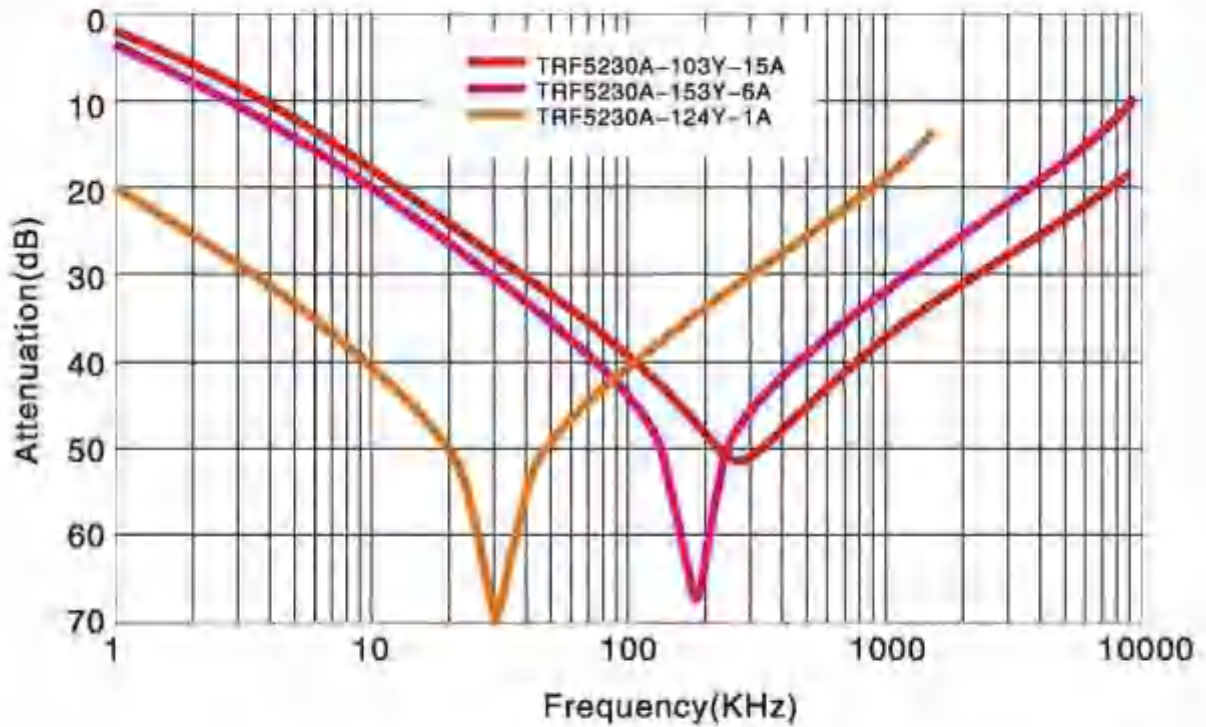
## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

### DIMENSIONS IN: mm

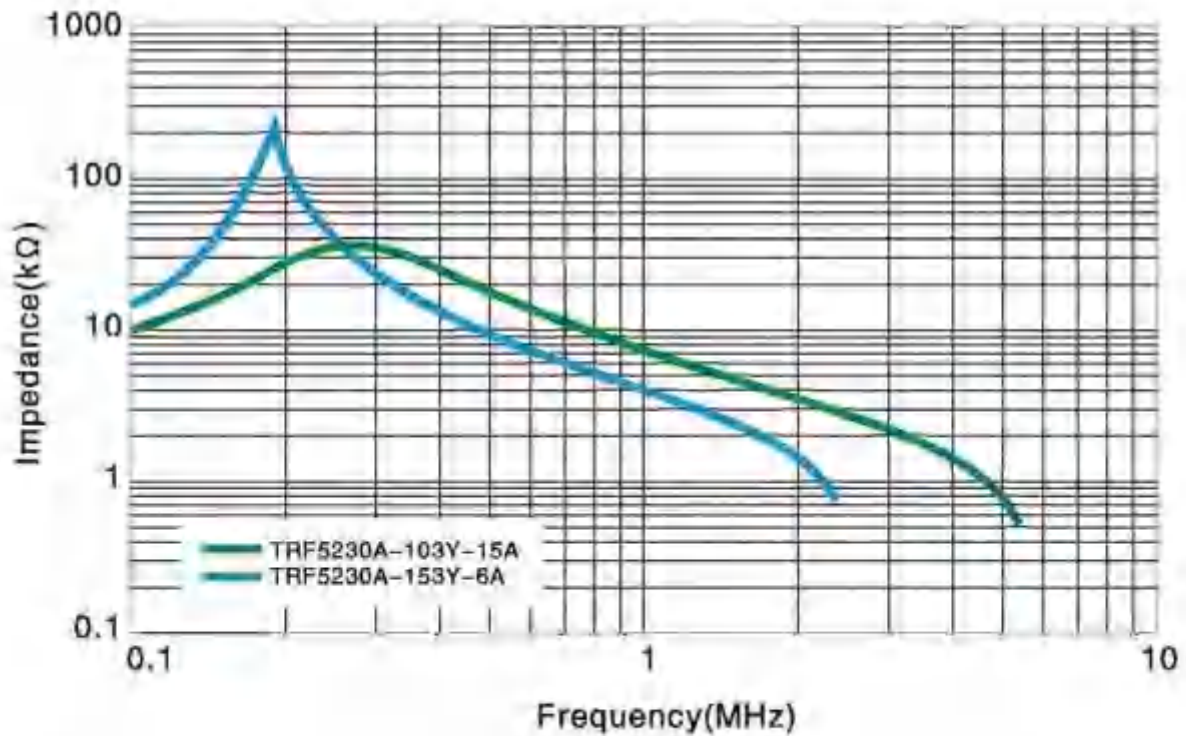


- Max operating voltage: 250V at 40°C
  - IDC Max: rating AC/DC current A @ 40°C
  - Hi-Pot 1500Vac winding to winding 3S
  - Inductance Tasting: 15.75KHz 0.1V HP4294A
  - RDC: QuadTech 1880 Milliohmmeter
  - Surge current Max 10ms: 20X IDC
  - Operating temperature: -40°C to +105°C
  - Storage Temperature: -40°C to +105°C
  - Resistance to soldering heat: 260°C for 10 seconds
  - Marking: Part number and date code
- Note: All specifications subject to change without notice.

### Typical Common Mode Attenuation:



### Typical Impedance:



# THROUGH-HOLE CURRENT-COMPENSATED CHOKES

## TRF102/202 SERIES



### FEATURES:

- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

### COMMON APPLICATIONS:

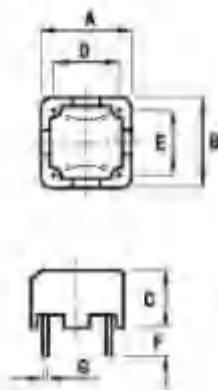
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Computer Peripheral Equipment

### ELECTRICAL CHARACTERISTICS:

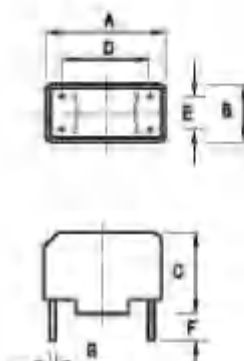
Part Number	Inductance mH	Test Freq KHz	DCR (mΩ)Max	IDC (A)Max
TRF102/202-123Y	12	10	1275	0.3
TRF102/202-452Y	4.5	10	385	0.6
TRF102/202-302Y	3	10	205	1.0
TRF102/202-222Y	2.2	10	150	1.5
TRF102/202-102Y	1	10	70	2

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

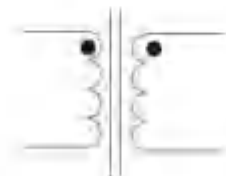
TRF102



TRF202



P/N	TRF102	TRF202
A	14	18
B	14	8.8
C	8.5	13.5
D	10	15.2
E	10	5.08
F	4	4.5
G	0.8	0.8



- Inductance tolerance.....+50% -30%
- Max operating voltage.....250V at 40°C
- IDC Max.....rating AC/DC current A @40°C
- Hi-Pot.....1500Vac winding to winding 3S
- Inductance Testing.....10KHz 0.1V HP4284A
- Operating temperature.....-40°C to +105°C
- Storage Temperature.....-40°C to +105°C

Note:All specifications subject to change without notice.

# THROUGH-HOLE CURRENT-COMPENSATED CHOKES

## TRF112/212 SERIES



### FEATURES:

- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

### COMMON APPLICATIONS:

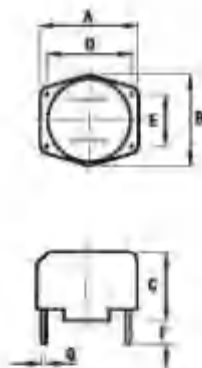
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Computer Peripheral Equipment

### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance mH	Test Freq KHz	DCR (mΩ)Max	IDC (A)Max
TRF112/212-383Y	38	10	1460	0.4
TRF112/212-273Y	27	10	1250	0.5
TRF112/212-153Y	15	10	465	0.6
TRF112/212-103Y	10	10	370	0.8
TRF112/212-682Y	6.8	10	245	1.2
TRF112/212-332Y	3.3	10	135	1.5
TRF112/212-182Y	1.8	10	75	2
TRF112/212-102Y	1	10	35	3.5

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

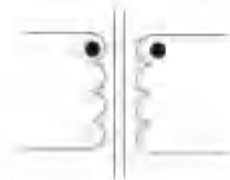
TRF112



TRF212



P/N	TRF112	TRF212
A	17.7	18.5
B	17.2	13.5
C	13.5	20
D	15	15
E	10	10
F	4	4
G	0.8	0.6



- Inductance tolerance.....+50% -30%
- Max operating voltage.....250V at 40°C
- IDC Max.....rating AC/DC current A @40°C
- Hi-Pot.....1500Vac winding to winding 3S
- Inductance Testing.....10KHz 0.1V HP4284A
- Operating temperature.....-40°C to +105°C
- Storage Temperature.....-40°C to +105°C

Note:All specifications subject to change without notice.

# THROUGH-HOLE CURRENT-COMPENSATED CHOKES

## TRF114/214 SERIES



### FEATURES:

- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

### COMMON APPLICATIONS:

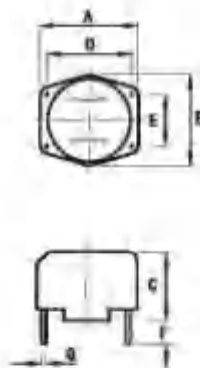
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Computer Peripheral Equipment

### ELECTRICAL CHARACTERISTICS:

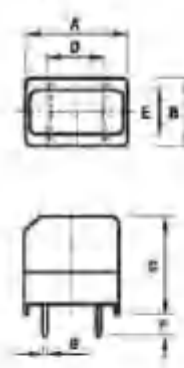
Part Number	Inductance mH	Test Freq KHz	DCR (mΩ)Max	IDC (A)Max
TRF114/214-473Y	47	10	1750	0.3
TRF114/214-393Y	39	10	810	0.5
TRF114/214-273Y	27	10	500	0.8
TRF114/214-153Y	15	10	375	1
TRF114/214-103Y	10	10	200	1.2
TRF114/214-882Y	6.6	10	130	1.5
TRF114/214-332Y	3.3	10	75	2.5
TRF114/214-202Y	2	10	55	3
TRF114/214-152Y	1.5	10	35	4

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

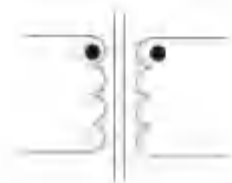
TRF114



TRF214



P/N	TRF114	TRF214
A	22.5	23
B	21.5	15.5
C	13.2	25
D	20	10
E	12.5	12.5
F	4	4
G	0.8	0.8



- Inductance tolerance.....+50% -30%
- Max operating voltage.....250V at 40°C
- IDC Max.....rating AC/DC current A @40°C
- Hi-Pol.....1500Vac winding to winding 3S
- Inductance Testing.....10KHz 0.1V HP4284A
- Operating temperature.....-40°C to +105°C
- Storage Temperature.....-40°C to +105°C

Note:All specifications subject to change without notice.

# THROUGH-HOLE CURRENT-COMPENSATED CHOKES

## TRF122/222 SERIES



### FEATURES:

- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

### COMMON APPLICATIONS:

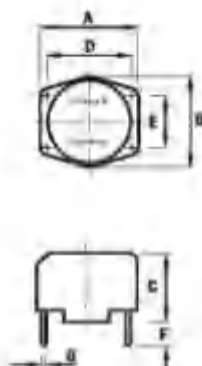
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Computer Peripheral Equipment

### ELECTRICAL CHARACTERISTICS:

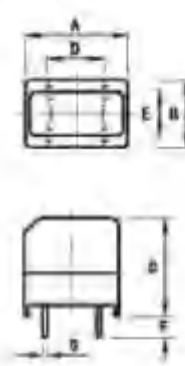
Part Number	Inductance mH	Test Freq KHz	DCR (mΩ)Max	IDC (A)Max
TRF122/222-473Y	47	10	1180	0.8
TRF122/222-333Y	39	10	1000	0.8
TRF122/222-183Y	18	10	610	1
TRF122/222-103Y	10	10	220	1.5
TRF122/222-682Y	6.8	10	147	2
TRF122/222-332Y	3.3	10	45	4

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

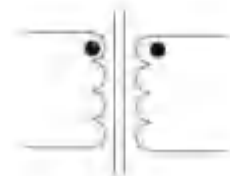
TRF122



TRF222



P/N	TRF122	TRF222
A	28	27
B	27	16
C	16.5	30
D	20	12.5
E	15	15
F	4	0.8
G	0.8	4



- Inductance tolerance..... +50% -30%
- Max operating voltage..... 250V at 40°C
- IDC Max..... rating AC/DC current A @40°C
- Hi-Pot..... 1500Vac winding to winding 3S
- Inductance Testing..... 10KHz 0.1V HP4284A
- Operating temperature..... -40°C to +105°C
- Storage Temperature..... -40°C to +105°C

Note:All specifications subject to change without notice.

# THROUGH-HOLE CURRENT-COMPENSATED CHOKES

## TRF142/242 SERIES



### FEATURES:

- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

### COMMON APPLICATIONS:

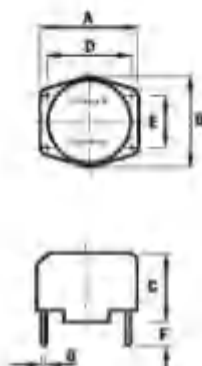
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Computer Peripheral Equipment

### ELECTRICAL CHARACTERISTICS:

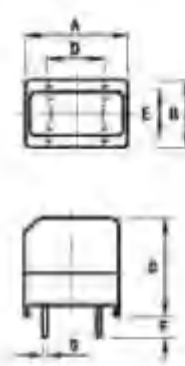
Part Number	Inductance mH	Test Freq KHz	DCR (mΩ)Max	IDC (A)Max
TRF142/242-683Y	68	10	1800	0.8
TRF142/242-333Y	33	10	810	1
TRF142/242-273Y	27	10	500	1.5
TRF142/242-682Y	6.8	10	190	2
TRF142/242-332Y	3.3	10	66	4

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

TRF142



TRF242



P/N	TRF142	TRF242
A	33.5	32
B	32.5	18
C	19.7	35
D	30	12.5
E	20	15
F	4.5	4
G	0.8	0.8



- Inductance tolerance..... +50% -30%
- Max operating voltage..... 250V at 40°C
- IDC Max..... rating AC/DC current A @40°C
- Hi-Pot..... 1500Vac winding to winding 3S
- Inductance Testing..... 10KHz 0.1V HP4284A
- Operating temperature..... -40°C to +105°C
- Storage Temperature..... -40°C to +105°C

Note:All specifications subject to change without notice.

# THROUGH-HOLE CURRENT-COMPENSATED CHOKES

## TRF152/252 SERIES



### FEATURES:

- Excellent Mechanical Strength
- 100KHz to 3MHz common mode resonance
- High Reliability and variant PCB-mount housing
- Low resistance and temperature rise

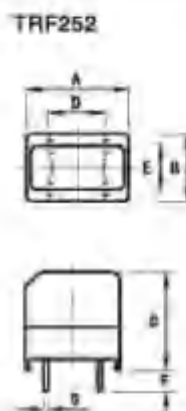
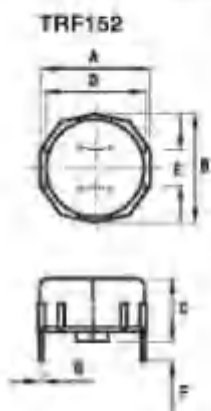
### COMMON APPLICATIONS:

- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDPTelevisions
- Computer Peripheral Equipment

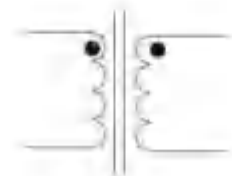
### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance mH	Test Freq KHz	DCR (mΩ)Max	IDC (A)Max
TRF152/252-683Y	68	10	1300	1
TRF152/252-183Y	18	10	350	2
TRF152/252-682Y	6.8	10	87	4
TRF152/252-392Y	3.9	10	41	6
TRF152/252-272Y	2.7	10	22	8

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



P/N	TRF152	TRF252
A	43	43
B	42	25
C	25	44
D	40	30.6
E	15	17.8
F	4.5	4.5
G	1.2	1.2



- Inductance tolerance..... +50% -30%
- Max operating voltage..... 250V at 40°C
- IDC Max..... rating AC/DC current A @40°C
- Hi-Pot..... 1500Vac winding to winding 3S
- Inductance Testing..... 10KHz 0.1V HP4284A
- Operating temperature..... -40°C to +105°C
- Storage Temperature..... -40°C to +105°C

Note: All specifications subject to change without notice.

# COMMON MODE POWER LINE CHOKE TRF102 SERIES



### FEATURES:

- High resonance frequency due to special winding technique
- Approx. 0.7% stray inductance for symmetrical interference suppression
- Suitable for wave soldering
- Design complies with EN 60938-2 (VDE 0565-2) and UL 1283
- RoHS-compatible

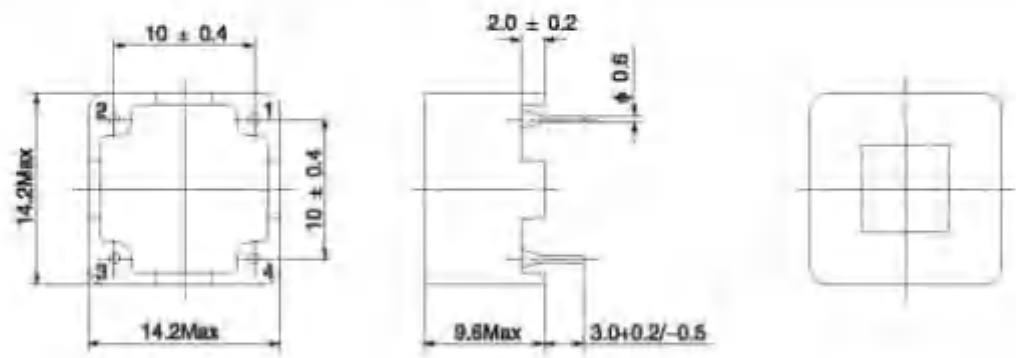
### APPLICATIONS:

- Suppression of common-mode interferences
- Switch-mode power applications
- Electronic ballasts in lamps

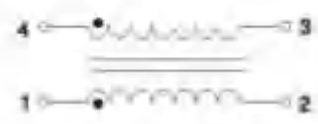
## ELECTRICAL CHARACTERISTICS:

Part Number	L(mH) +50%/-30%	Lk(μH) Typ	Rated Current (A)	RDC(mΩ) Max
TRF102-112Y	1.1	6	2.0	65
TRF102-182Y	1.8	10	1.5	110
TRF102-302Y	3.0	20	1.0	220
TRF102-442Y	4.4	30	0.8	400
TRF102-123Y	12	80	0.3	1100
TRF102-223Y	22	130	0.3	1500

## PHYSICAL CHARACTERISTICS:



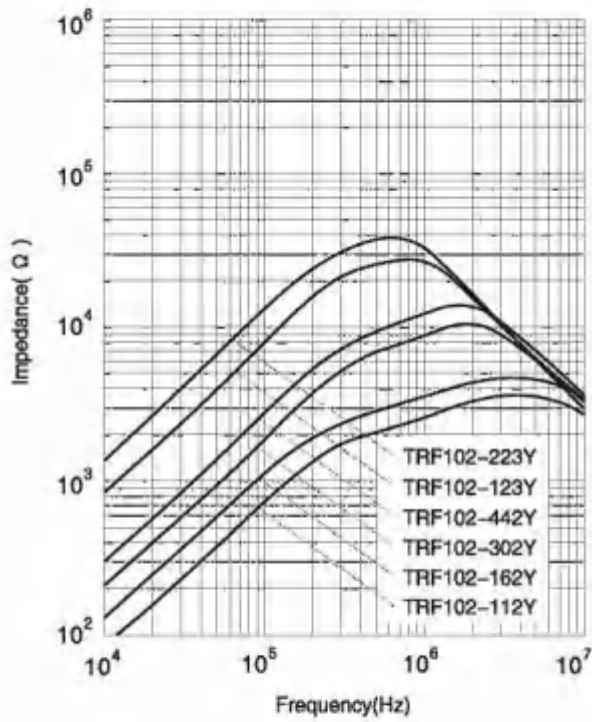
### Winding



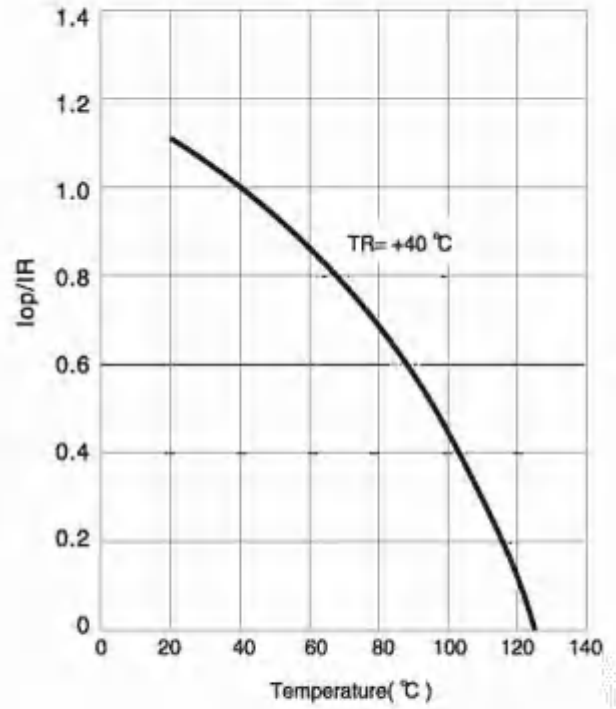
### Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-25 °C to +125 °C
- Housing.....LL94 V-0

Impedance |Z| versus frequency F  
measured with windings in parallel at +20°C  
typical values



Current derating Iop/IR  
versus ambient temperature TA



# COMMON MODE CHOKE UT1609 SERIES



## FEATURES:

- 17.0X13.0mm Max. (LXW), 9.5mm Max. Height.
- Inductance range: 0.47mH-10mH
- Rated current range: 0.2-1.10A
- Small size and large inductance type.
- Excellent attenuation characteristics in low frequency.
- RoHS Compliance

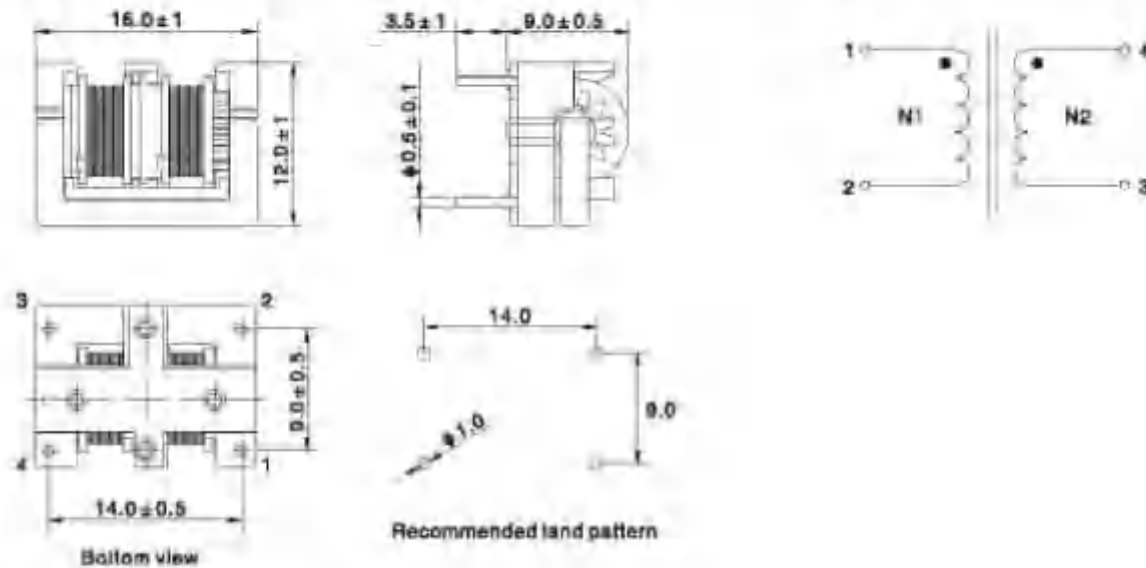
## APPLICATIONS:

- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDP Televisions
- VCR/LV,OA equipment

## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH) Min 1KHz	Leakage Inductance (uH) Max 100KHz	DCR (Ω) Max @20°C	Rated current (A) 50/60Hz
UT1609-471Y-1.1A	0.47	50	0.15	1.1
UT1609-681Y-0.85A	0.68	50	0.25	0.85
UT1609-102Y-0.65A	1.0	150	0.35	0.65
UT1609-222Y-0.45A	2.2	150	0.7	0.45
UT1609-392Y-0.36A	3.9	200	1.2	0.36
UT1609-473Y-0.34A	4.7	300	1.8	0.34
UT1609-682Y-0.25A	6.8	400	2.5	0.25
UT1609-103Y-0.2A	10.0	550	4.0	0.2

## PHYSICAL CHARACTERISTICS:



## TECHNICAL INFORMATION:

1. Rated current: The AC current at which the temperature rise is  $\Delta T=45^{\circ}\text{C}$ ( $T_a=20^{\circ}\text{C}$ )
2. Please give sufficient consideration to the thick wire used when producing the P.C.B.(mounting holes  $\phi$  1.0mm)
3. Storage temperature range:  $-40^{\circ}\text{C} - +125^{\circ}\text{C}$ .
4. Operating temperature range:  $-40^{\circ}\text{C} - +125^{\circ}\text{C}$  (including coil's self temperature rise)
5. Max operating voltage: 250V
6. Marking: Part number and date code
7. Resistance to soldering heat  $260^{\circ}\text{C}$  for 10 seconds
8. All specifications subject to change without notice.

## AC LINE FILTERS, COMMON MODE COILS

### UT1711 SERIES



#### FEATURES:

- Ferrite material
- High permeability
- High impedance in wide frequency range due to divided bobbin
- Small gear common mode chokes for low current applications
- 11mm height low profile
- Operating temperature range from -25°C to +120°C
- UL 94V-0 flame retardant rated base and bobbin

#### APPLICATIONS:

- Audio-visual equipment
- Office automation equipment
- Digital appliances
- Compact power supplies

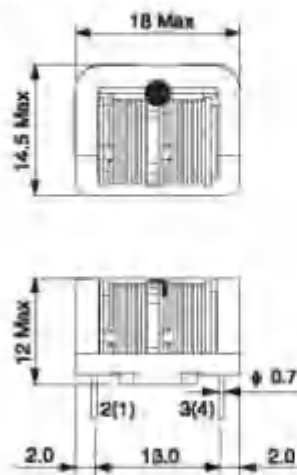
#### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)Min	Rated current (A)	DCR Max. (Ω)	Temperature rise (°C)Max															
UT1711-162Y	1.6	2.0	0.09	55															
UT1711-292Y	2.9	1.7	0.12	55															
UT1711-432Y	4.3	1.5	0.14	55															
UT1711-642Y	6.4	1.3	0.21	55															
UT1711-812Y	8.1	1.1	0.27	55															
UT1711-103Y	10.8	1.0	0.36	55															
UT1711-163Y	16.9	0.8	0.56	55															
UT1711-193Y	19.6	0.7	0.71	55															
UT1711-233Y	23.7	0.6	0.78	55 </tr <tr> <td>UT1711-403Y</td> <td>40.3</td> <td>0.5</td> <td>1.36</td> <td>55</td> </tr> <tr> <td>UT1711-593Y</td> <td>59.6</td> <td>0.4</td> <td>2.02</td> <td>55</td> </tr> <tr> <td>UT1711-114Y</td> <td>115.7</td> <td>0.3</td> <td>3.57</td> <td>55</td> </tr>	UT1711-403Y	40.3	0.5	1.36	55	UT1711-593Y	59.6	0.4	2.02	55	UT1711-114Y	115.7	0.3	3.57	55
UT1711-403Y	40.3	0.5	1.36	55															
UT1711-593Y	59.6	0.4	2.02	55															
UT1711-114Y	115.7	0.3	3.57	55															

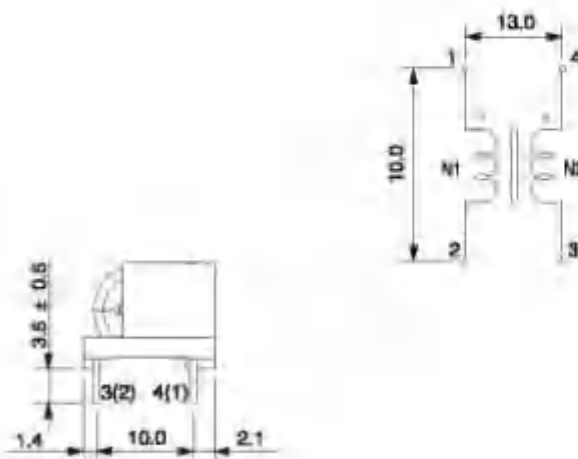
- Rated Voltage: 250 VAC
- Withstanding Voltage: 2400 VAC (2 seconds, between lines)
- Insulation Resistance: > 100 MΩ at 500 VDC (between lines)
- Inductance Measurement Condition: 10 kHz
- Thermal Class: E (120°C)
- Operating Temperature Range: -25°C to +120°C (include self temperature rise)

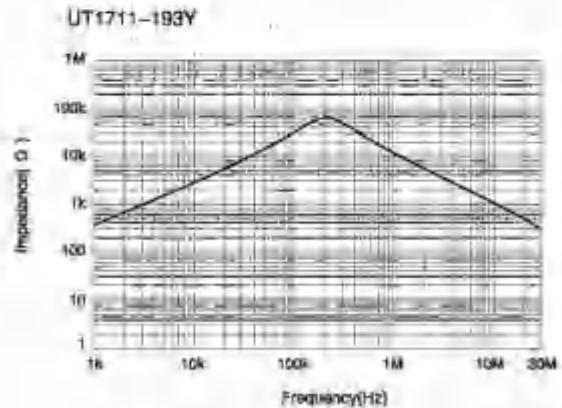
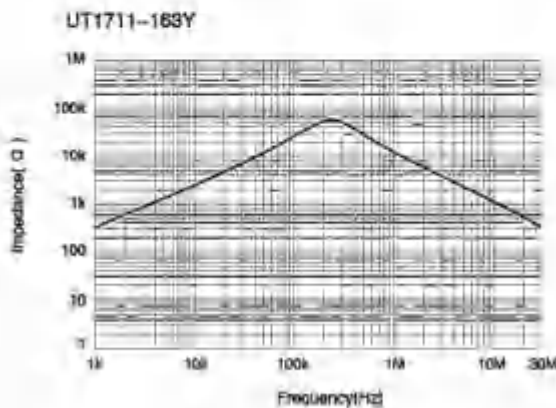
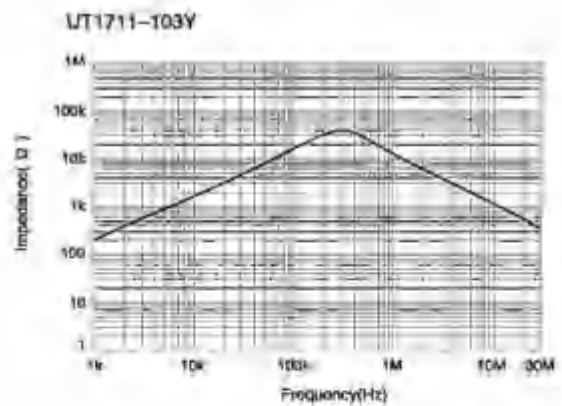
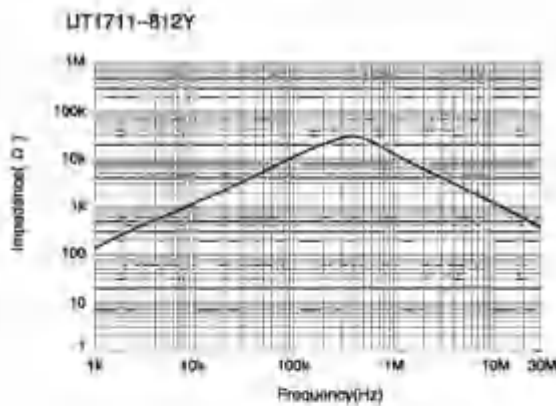
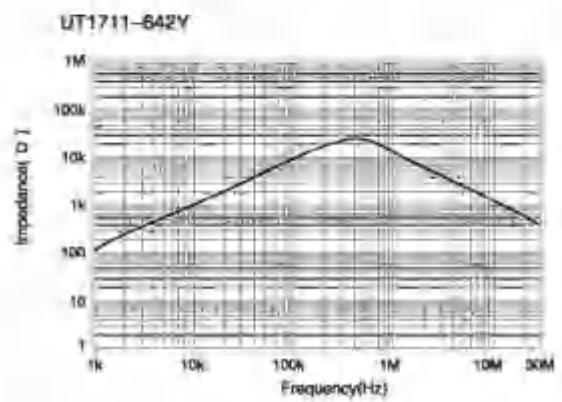
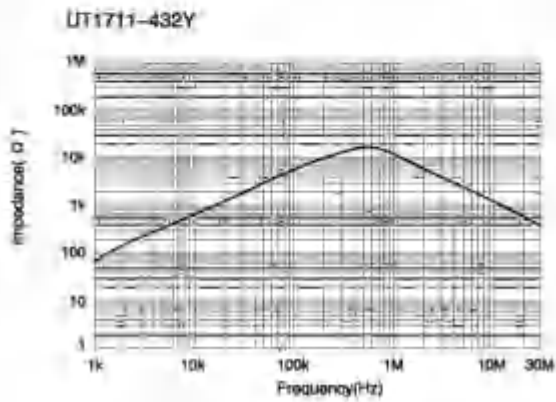
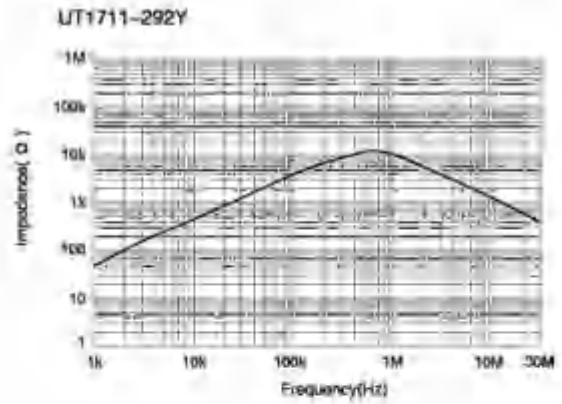
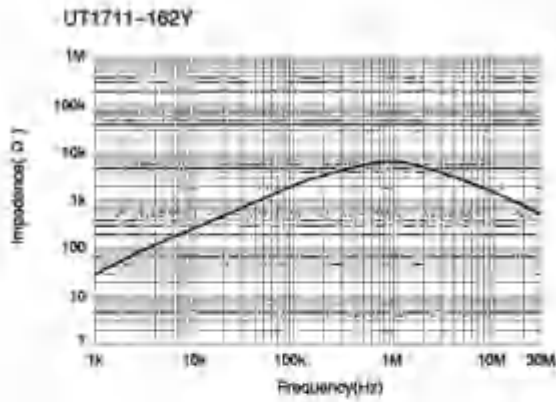
#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

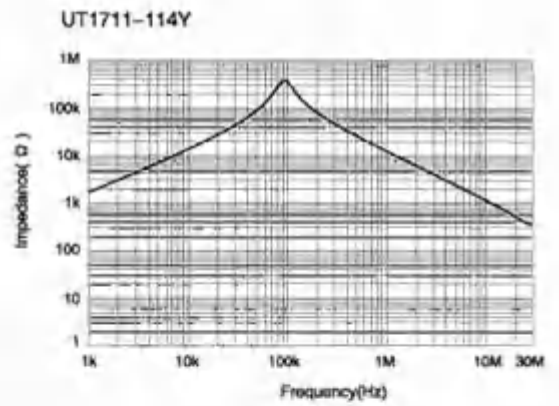
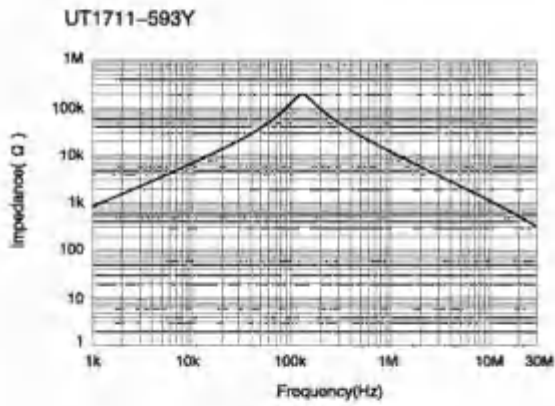
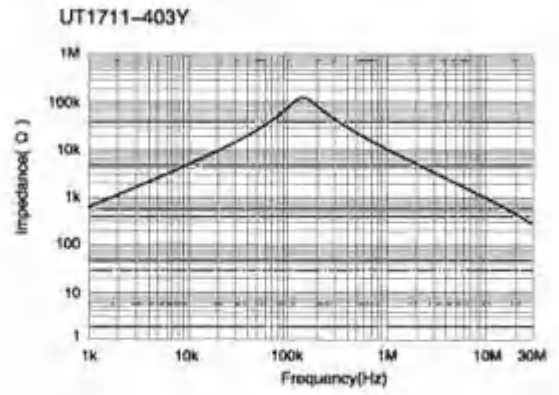
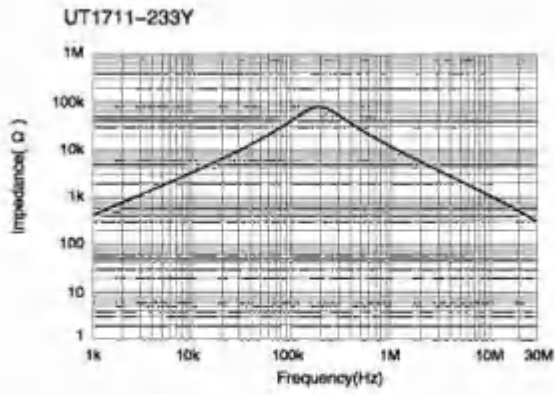
Dimensions(mm)



Winding







## AC LINE FILTERS, COMMON MODE COILS

### UT1711A SERIES



#### FEATURES:

- Ferrite material
- High permeability
- High impedance in wide frequency range due to divided bobbin
- Small gear common mode chokes for low current applications
- 11mm height low profile
- Operating temperature range from -25°C to +120°C
- UL 94V-0 flame retardant rated base and bobbin

#### APPLICATIONS:

- Audio-visual equipment
- Office automation equipment
- Digital appliances
- Compact power supplies

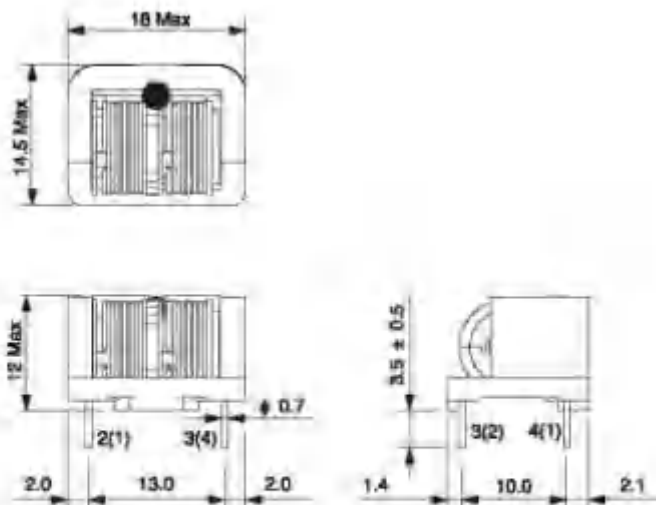
#### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (mH)Min	Rated current (A)	DCR Max. (Ω)	Temperature rise (°C)Max
UT1711A-132Y	1.3	2.0	0.06	50
UT1711A-232Y	2.3	1.7	0.1	50
UT1711A-362Y	3.6	1.5	0.13	50
UT1711A-462Y	4.6	1.3	0.18	50
UT1711A-642Y	6.4	1.1	0.24	50
UT1711A-842Y	8.4	1.0	0.32	50
UT1711A-133Y	13.4	0.8	0.5	50
UT1711A-153Y	15.4	0.7	0.63	50
UT1711A-183Y	18.5	0.6	0.69	50
UT1711A-323Y	32.4	0.5	1.21	50
UT1711A-463Y	46.7	0.4	1.79	50
UT1711A-923Y	92.5	0.3	3.16	50

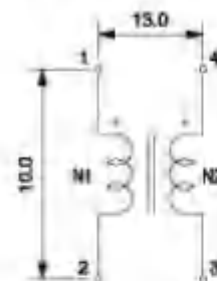
- Rated Voltage: 250 VAC
- Withstanding Voltage: 2400 VAC (2 seconds, between lines)
- Insulation Resistance: > 100 MΩ at 500 VDC (between lines)
- Inductance Measurement Condition: 10 kHz
- Thermal Class: E (120°C)
- Operating Temperature Range: -25°C to +120°C (include self temperature rise)

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

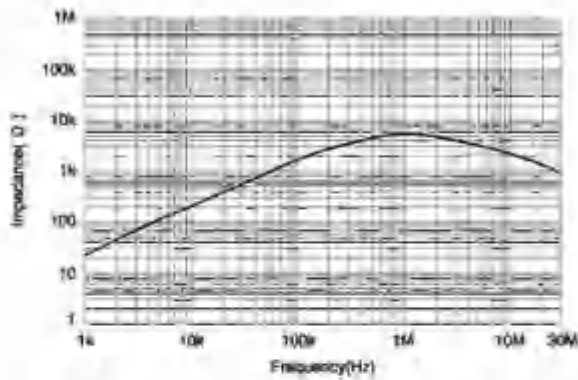
Dimensions(mm)



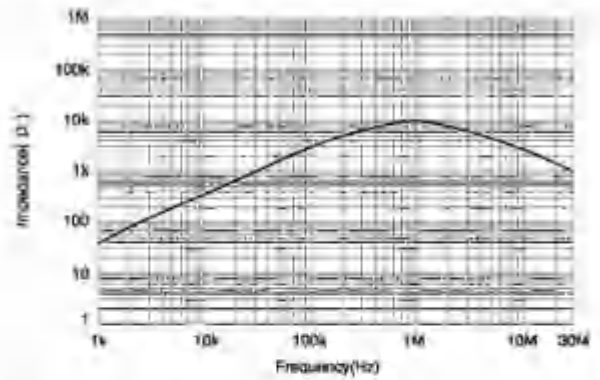
Winding



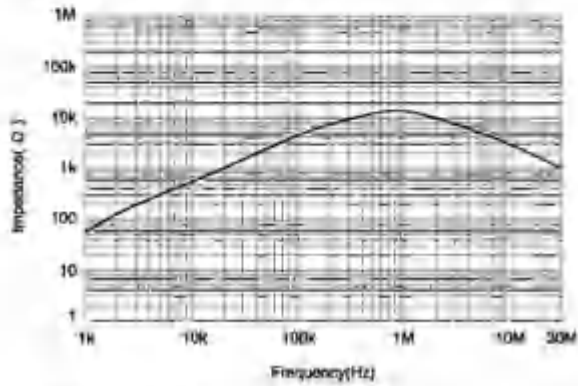
LT1711A-132Y



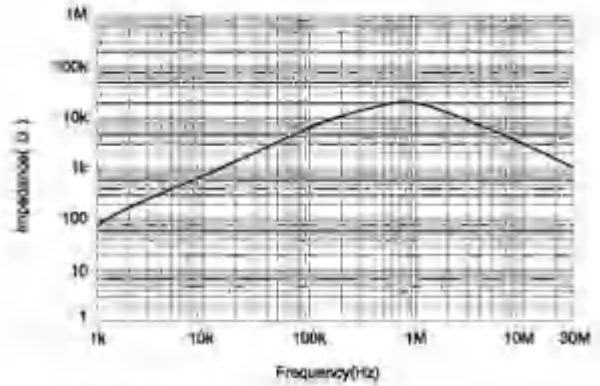
LT1711A-232Y



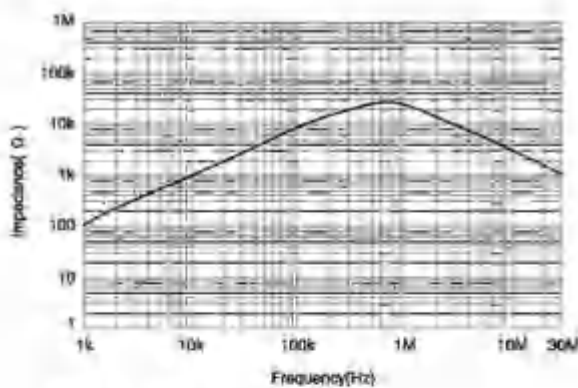
LT1711A-382Y



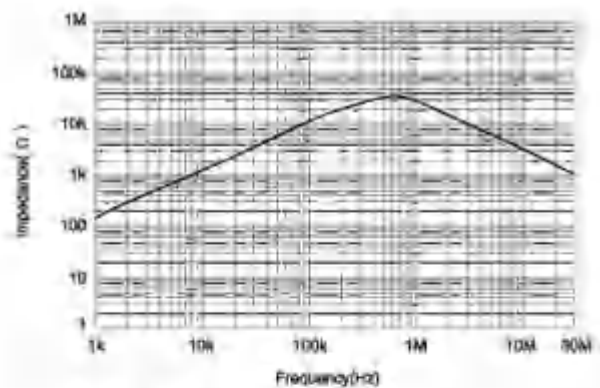
LT1711A-482Y



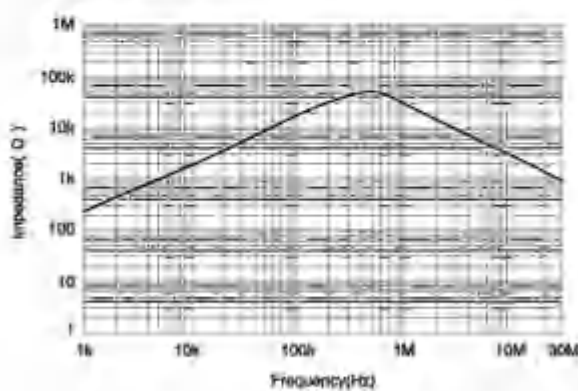
LT1711A-642Y



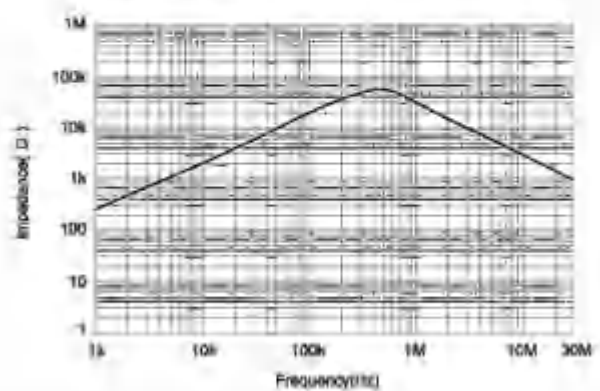
LT1711A-842Y



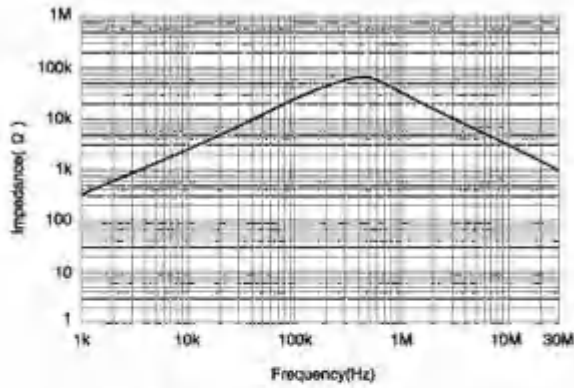
LT1711A-133Y



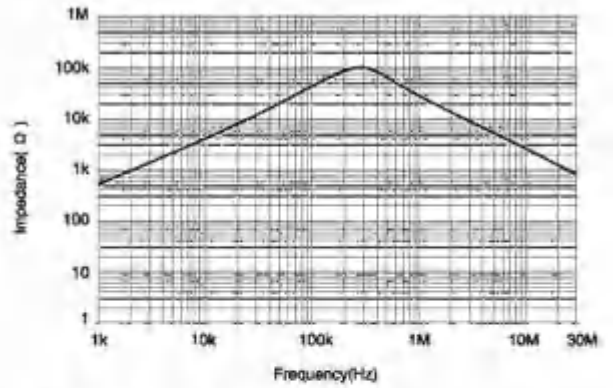
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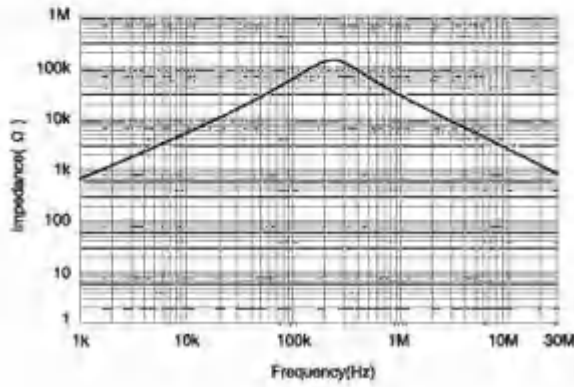
UT1711A-183Y



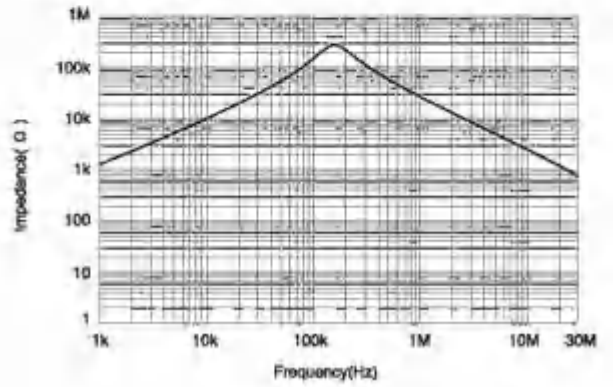
UT1711A-323Y



UT1711A-483Y



UT1711A-923Y



# COMMON MODE POWER LINE CHOKE UT2024 SERIES



## FEATURES:

- Closed rectangular ferrite core
- 2 section winding for excellent high frequency performance
- 1% stray inductance for symmetrical interference suppression

## APPLICATIONS:

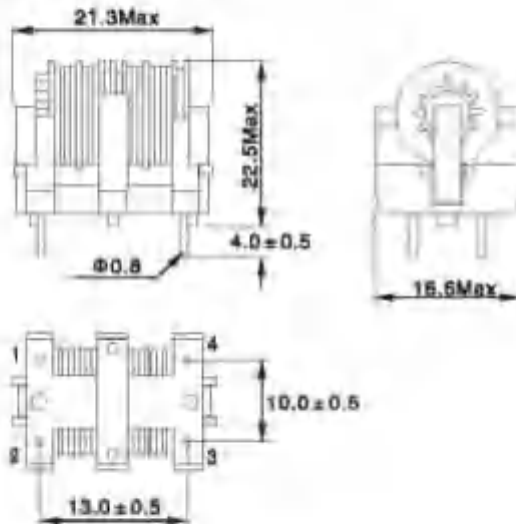
- Switch mode power supplies
- Suppression of common mode noise
- Compact switch mode power supplies
- Electronic ballast applications(LED bulb)
- Lighting

## ELECTRICAL CHARACTERISTICS:

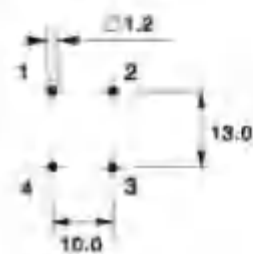
Part Number	L (mH)Min	Rated Current (A)	RDC max. (Ω)
UT2024-821Y	0.82	2.0	0.065
UT2024-122Y	1.2	1.8	0.095
UT2024-182Y	1.8	1.5	0.12
UT2024-222Y	2.2	1.3	0.165
UT2024-272Y	2.7	1.2	0.19
UT2024-332Y	3.3	1.2	0.21
UT2024-392Y	3.9	1.0	0.28
UT2024-562Y	5.6	0.8	0.418
UT2024-682Y	6.8	0.7	0.47
UT2024-103Y	10	0.6	0.71
UT2024-183Y	18	0.5	1.2
UT2024-223Y	22	0.4	1.64
UT2024-333Y	33	0.3	2.5

## PHYSICAL CHARACTERISTICS:

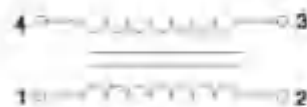
Dimensions 1



Hole pattern(in mm)



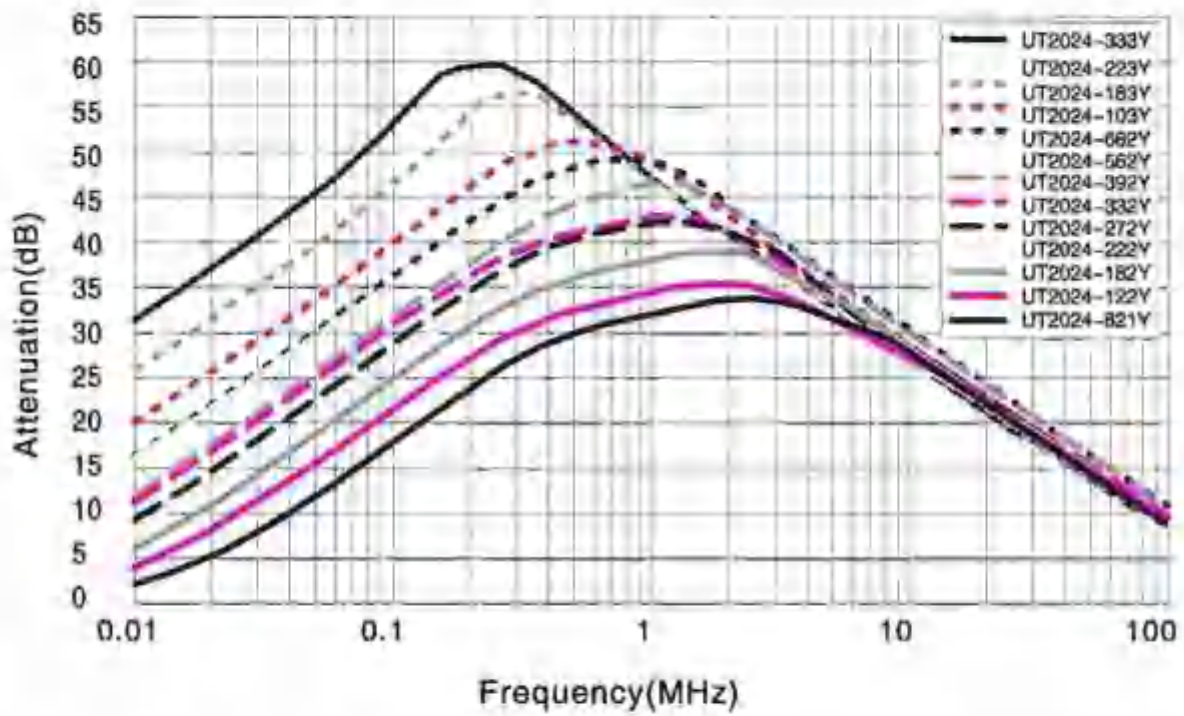
Winding



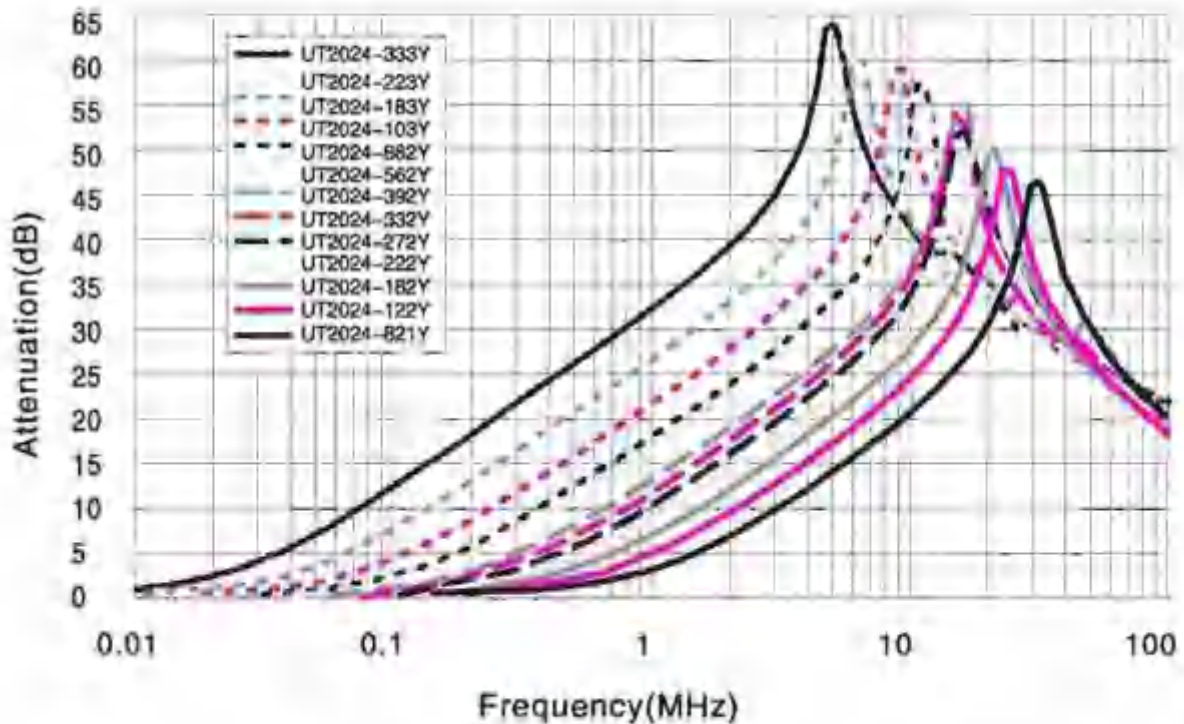
Notes:

Rated voltage.....	250Vac
Frequency.....	50/60Hz
Insulation test voltage.....	2000V
Operating temperature.....	-25 ℃ to +125 ℃
Housing.....	UL94 V-0

### ATTENUATION COMMON MODE



### ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE UT2323 SERIES



## FEATURES:

- High resonance frequency due to 2-section winding
- Approx. 1% stray inductance for symmetrical interference suppression
- Low leakage due to closed core shape
- High pulse strength
- Low whirring noise
- Suitable for wave soldering
- RoHS-compatible

## APPLICATIONS:

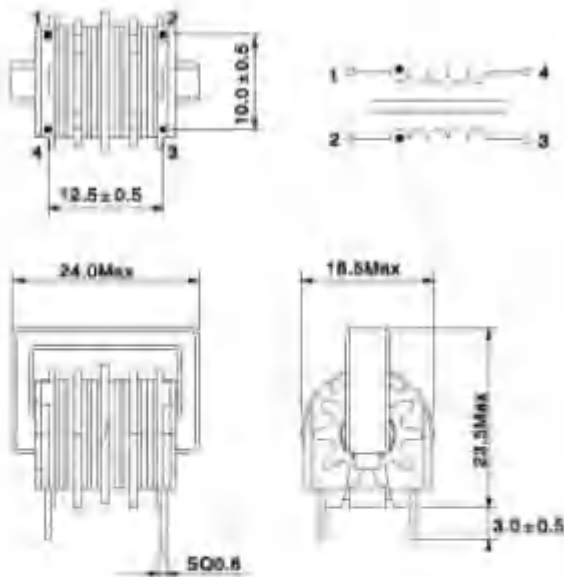
- Suppression of common-mode interferences
- Switch-mode power applications
- Electronic ballasts in lamps

## ELECTRICAL CHARACTERISTICS:

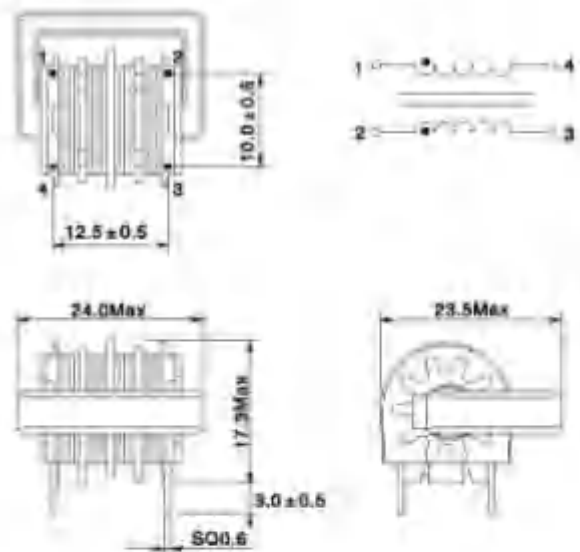
Part Number	L(mH) ±50%±30%	Lk(μH) Typ	Rated Current (A)	RDC(mΩ) Max
UT2323V/H-332Y	3.3	27	2.2	110
UT2323V/H-682Y	6.6	55	1.7	190
UT2323V/H-103Y	10	85	1.4	300
UT2323V/H-153Y	15	125	1.1	440
UT2323V/H-223Y	22	165	1.0	580
UT2323V/H-273Y	27	230	0.9	750
UT2323V/H-393Y	39	330	0.7	1100
UT2323V/H-473Y	47	400	0.6	1400
UT2323V/H-104Y	100	850	0.4	3000

## PHYSICAL CHARACTERISTICS:

UT2323V



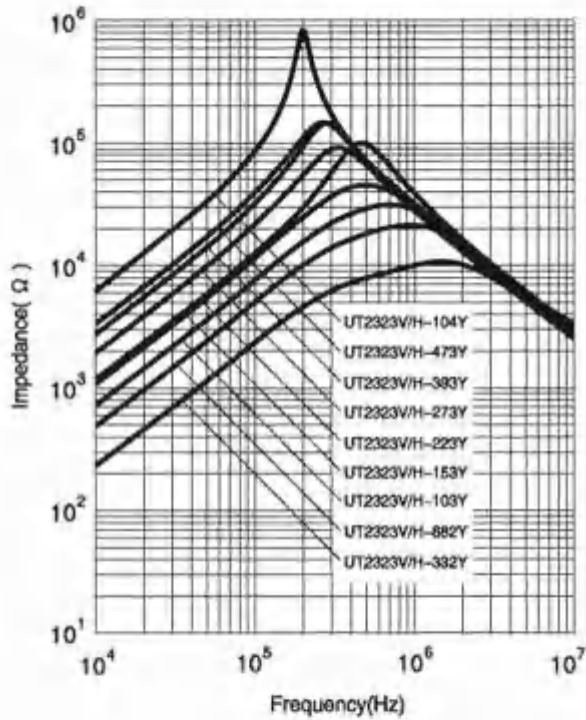
UT2323H



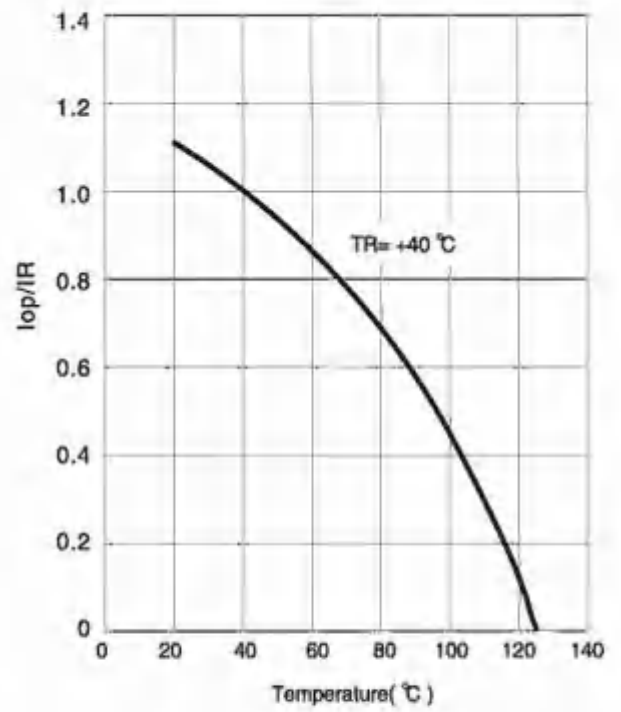
**Notes:**

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage.....1500V
- Operating temperature.....-25 °C to +125 °C
- Housing.....UL94 V-0

Impedance  $|Z|$  versus frequency  $F$   
 measured with windings in parallel at +20°C  
 typical values



Current derating  $I_{op}/I_R$   
 versus ambient temperature  $T_A$



# COMMON MODE POWER LINE CHOKE UT2020 SERIES



## FEATURES:

- High resonance frequency due to 2–section winding
- Approx. 1% stray inductance for symmetrical interference suppression
- Low leakage due to closed core shape
- High pulse strength
- Low whirring noise
- Suitable for wave soldering
- RoHS–compatible

## APPLICATIONS:

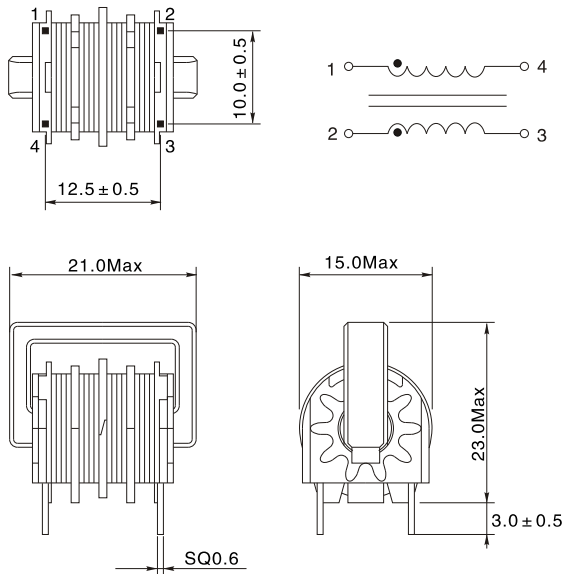
- Suppression of common–mode interferences
- Switch–mode power applications
- Electronic ballasts in lamps

## ELECTRICAL CHARACTERISTICS:

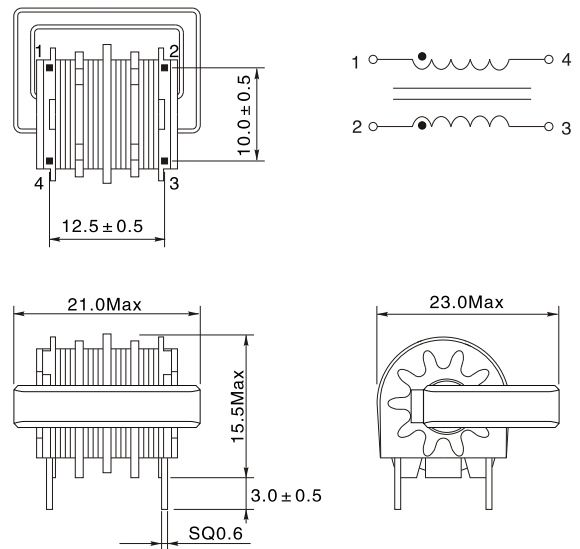
Part Number	L(mH) +50%/–30%	Lk(uH) Typ	Rated Current (A)	RDC(mΩ) Max
UT2020V/H–332Y	3.3	35	1.8	140
UT2020V/H–682Y	6.8	70	1.3	280
UT2020V/H–103Y	10	100	1.1	400
UT2020V/H–153Y	15	150	0.9	600
UT2020V/H–223Y	22	220	0.8	800
UT2020V/H–273Y	27	270	0.7	1000
UT2020V/H–393Y	39	390	0.6	1500
UT2020V/H–473Y	47	470	0.5	2000
UT2020V/H–683Y	68	700	0.4	3000
UT2020V/H–104Y	100	1000	0.35	4500

## PHYSICAL CHARACTERISTICS:

UT2020V



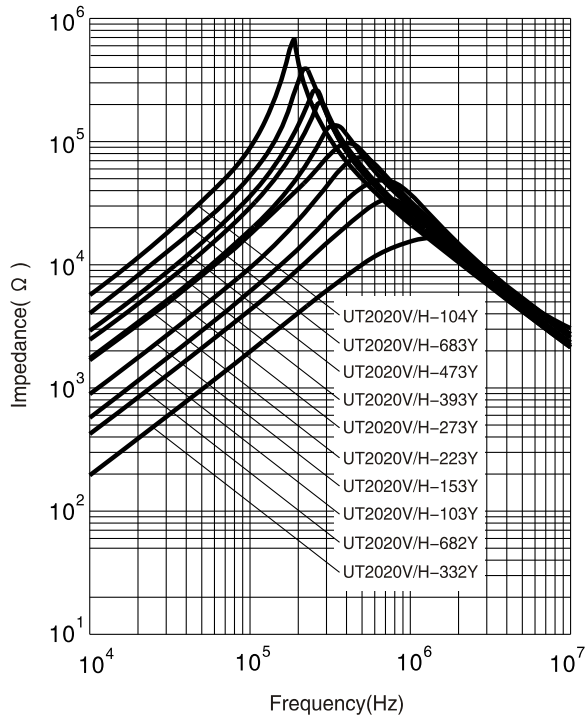
UT2020H



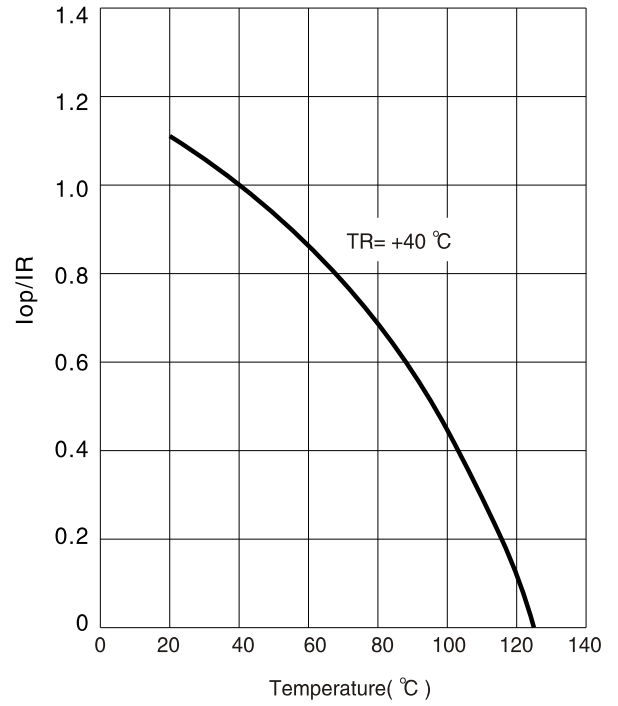
Notes:

- Rated voltage.....250Vac
- Frequency.....50/60Hz
- Insulation test voltage..... 1500V
- Operating temperature.....–25 °C to +125 °C
- Housing..... UL94 V–0

Impedance |Z| versus frequency F  
measured with windings in parallel at +20°C  
typical values



Current derating Iop/IR  
versus ambient temperature TA





# COMMON MODE INDUCTORS LFT1112 SERIES

## FEATURES:

- High inductance with low resistance
- Excellent differential-mode suppression
- High pulse-handling capability
- Industry best inductance/rated current ratio
- Suitable for wave soldering
- Design complies with EN 60998-2 (VDE 0585-2)
- RoHS-compatible

## APPLICATIONS:

- Electronic ballasts for lamps
- High power switch-mode power supplies for consumer electronics

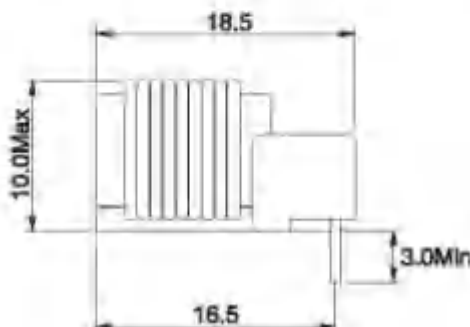
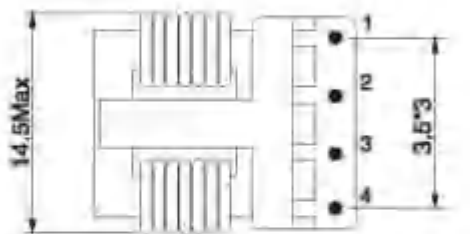
## CONSTRUCTION:

- Current-compensated double choke
- Closed magnetic circuit with frame construction
- Height 10 mm
- Clearance and creepage distances 3mm Min

## ELECTRICAL CHARACTERISTICS:

Part Number	L(mH) 10KHz,0.1V +50%/-30%	Rated current (A)Max	DCR (mΩ)Typ
LFT1112-332Y	3.3	0.60	200
LFT1112-682Y	6.8	0.53	240
LFT1112-103Y	10	0.46	380
LFT1112-153Y	15	0.39	450
LFT1112-203Y	20	0.33	520
LFT1112-253Y	25	0.28	600
LFT1112-303Y	30	0.23	800

## PHYSICAL CHARACTERISTICS



## WINDING



- Rated voltage: 250VAC max @ 40°C
- Insulation voltage: 1500VAC, 2S(line-line)
- Inductor Testing: HP4284A (Equivalent acceptable)  
DCR: WK3260B
- Storage Temperature: -40°C to +40°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- All specifications subject to change without notice.



## COMMON MODE INDUCTORS LFT1214 SERIES

### FEATURES:

- High inductance with low resistance
- Excellent differential-mode suppression
- High pulse-handling capability
- Industry best inductance/rated current ratio
- Suitable for wave soldering
- Design complies with EN 60938-2 (VDE 0585-2)
- RoHS-compatible

### APPLICATIONS:

- Electronic ballasts for lamps
- High power switch-mode power supplies for consumer electronics

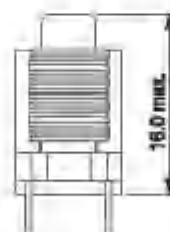
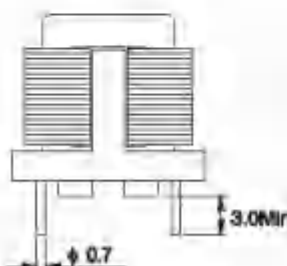
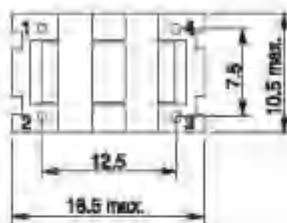
### CONSTRUCTION:

- Current-compensated double choke
- Closed magnetic circuit with frame construction
- Height 16 mm
- Clearance and creepage distances 3mm Min

### ELECTRICAL CHARACTERISTICS:

Part Number	L(mH) 10kHz,0.1V +50%/-30%	Rated current (A)Max	DCR (mΩ)Typ
LFT1214-102Y	1.0	2.26	85
LFT1214-152Y	1.5	1.63	95
LFT1214-222Y	2.2	1.27	140
LFT1214-332Y	3.3	1.06	160
LFT1214-472Y	4.7	0.77	180
LFT1214-682Y	6.8	0.60	190
LFT1214-103Y	10	0.39	240
LFT1214-153Y	15	0.33	300
LFT1214-203Y	20	0.28	380
LFT1214-303Y	30	0.23	460

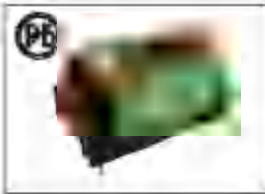
### PHYSICAL CHARACTERISTICS



### WINDING



- Rated voltage: 250VAC max@40°C
- Insulation voltage: 1500VAC,2S(line-line)
- Inductor Teething: HP4284A (Equivalent acceptable)  
DCR: WK3260B
- Storage Temperature: -40°C to +40°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: inductance & Tolerance
- All specifications subject to change without notice.



## COMMON MODE INDUCTORS LFT1418 SERIES

### FEATURES:

- High inductance with low resistance
- Excellent differential-mode suppression
- High pulse-handling capability
- Industry best inductance/rated current ratio
- Suitable for wave soldering
- Design complies with EN 60938-2 (VDE 0585-2)
- RoHS-compatible

### APPLICATIONS:

- Electronic ballasts for lamps
- High power switch-mode power supplies for consumer electronics

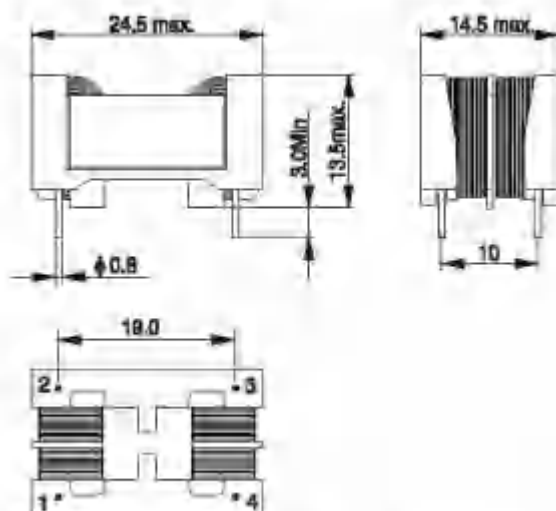
### CONSTRUCTION:

- Current-compensated double choke
- Closed magnetic circuit with frame construction
- Height 13.5 mm
- Clearance and creepage distances 3mm Min

### ELECTRICAL CHARACTERISTICS:

Part Number	L(mH) 10KHz,0.1V +50%/-30%	Rated current (A)Max	DCR (mΩ)Typ
LFT1418-222Y	2.2	1.39	60
LFT1418-332Y	3.3	1.27	70
LFT1418-682Y	6.8	1.06	85
LFT1418-103Y	10	0.96	120
LFT1418-153Y	15	0.77	150
LFT1418-223Y	22	0.60	200
LFT1418-273Y	27	0.53	260
LFT1418-303Y	30	0.46	310
LFT1418-333Y	33	0.39	340
LFT1418-473Y	47	0.33	410
LFT1418-683Y	68	0.28	500

### PHYSICAL CHARACTERISTICS



### WINDING



- Rated voltage: 250VAC max@40°C
- Insulation voltage: 1500VAC,2S(line-line)
- Inductor Testing: HP4264A (Equivalent acceptable)  
DCR: WK3260B
- Storage Temperature: -40°C to +40°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat:260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- All specifications subject to change without notice.



## COMMON MODE INDUCTORS LFT1512 SERIES

### FEATURES:

- High inductance with low resistance
- Excellent differential-mode suppression
- High pulse-handling capability
- Industry best inductance/rated current ratio
- Suitable for wave soldering
- Design complies with EN 60938-2 (VDE 0565-2)
- RoHS-compatible

### APPLICATIONS:

- Electronic ballasts for lamps
- High power switch-mode power supplies for consumer electronics

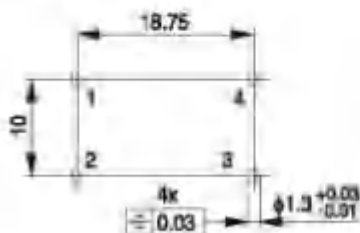
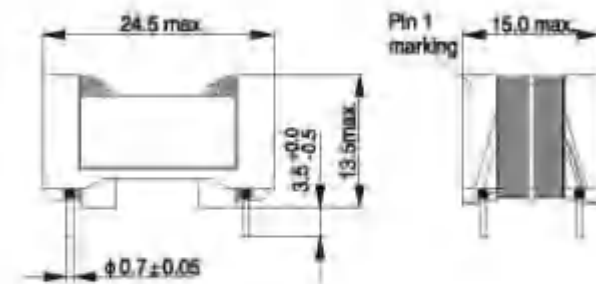
### CONSTRUCTION:

- Current-compensated double choke
- Closed magnetic circuit with frame construction
- 4-section winding with direct winding of the core
- Height 14 mm
- Clearance and creepage distances 3mm Min

### ELECTRICAL CHARACTERISTICS:

Part Number	L(ΩA) (mH)+50%/-30% 10KHz,0.1V	Lk (μH)Max 10KHz,0.5V	Rated current (A)Max	DCR (mΩ)Typ
LFT1512-103Y	10	200	1.6	290
LFT1512-153Y	15	290	1.3	430
LFT1512-273Y	27	520	0.9	770
LFT1512-393Y	39	760	0.8	1100
LFT1512-473Y	47	920	0.7	1260
LFT1512-683Y	68	1340	0.6	1970
LFT1512-104Y	100	1930	0.45	2930

### PHYSICAL CHARACTERISTICS



Layout recommendation  
(top view)

### WINDING



- Rated voltage: 250VAC max @ 40°C
- Insulation voltage: 1500VAC, 2S(line-line)
- Inductor Testing: HP4294A (Equivalent acceptable)  
DCR: WK3260B
- Storage Temperature: -40°C to +40°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- All specifications subject to change without notice.



# COMMON MODE INDUCTORS

## LFT1720 SERIES

### FEATURES:

- High inductance with low resistance
- Excellent differential-mode suppression
- High pulse-handling capability
- Industry best inductance/rated current ratio
- Suitable for wave soldering
- Design complies with EN 60938-2 (VDE 0585-2)
- RoHS-compatible

### APPLICATIONS:

- Electronic ballasts for lamps
- High power switch-mode power supplies for consumer electronics

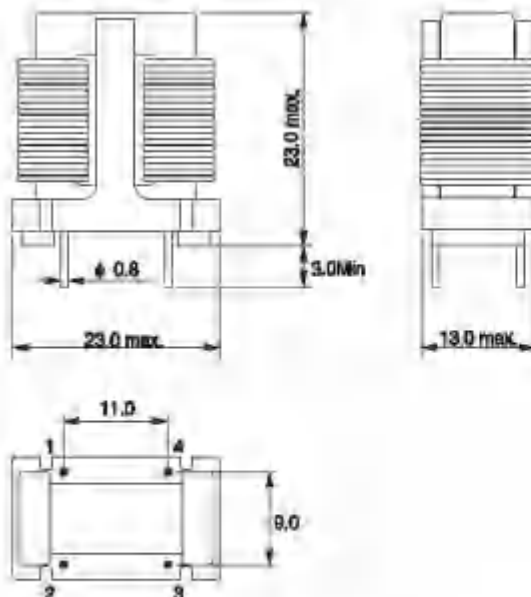
### CONSTRUCTION:

- Current-compensated double choke
- Closed magnetic circuit with frame construction
- Height: 23 mm
- Clearance and creepage distances 3mm Min

### ELECTRICAL CHARACTERISTICS:

Part Number	L(mH) 10kHz,0.1V +50%/-30%	Rated current (A)Max	DCR (mΩ)Typ
LFT1720-222Y	2.2	4.02	65
LFT1720-332Y	3.3	3.08	70
LFT1720-472Y	4.7	2.85	75
LFT1720-682Y	6.8	2.26	90
LFT1720-103Y	10	2.04	120
LFT1720-163Y	15	1.90	150
LFT1720-203Y	20	1.83	200
LFT1720-253Y	25	1.51	300

### PHYSICAL CHARACTERISTICS



### WINDING



- Rated voltage: 250VAC max@40°C
- Insulation voltage: 1500VAC,2S(line-line)
- Inductor Testing: HP4284A (Equivalent acceptable)  
DCR: WK3260B
- Storage Temperature: -40°C to +40°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat:280°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: inductance & Tolerance
- All specifications subject to change without notice.



## COMMON MODE INDUCTORS

### LFT2312 SERIES

#### FEATURES:

- High inductance with low resistance
- Excellent differential-mode suppression
- High pulse-handling capability
- Industry best inductance/rated current ratio
- Suitable for wave soldering
- Design complies with EN 60938-2 (VDE 0565-2)
- RoHS-compatible

#### APPLICATIONS:

- Electronic ballasts for lamps
- High power switch-mode power supplies for consumer electronics

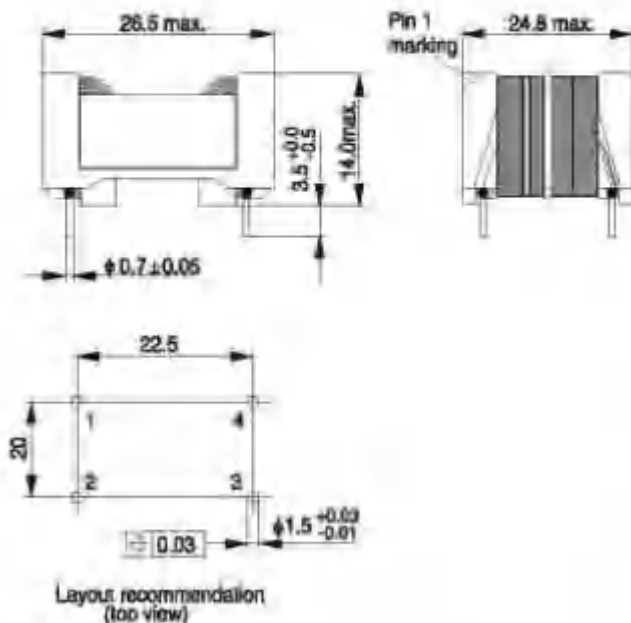
#### CONSTRUCTION:

- Current-compensated double choke
- Closed magnetic circuit with frame construction
- 4-section winding with direct winding of the core
- Height 14 mm
- Clearance and creepage distances 3mm Min

#### ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) (mH)+50%/-30% 10KHz,0.1V	Lk (uH)Max 10KHz,0.1V	Rated current (A)Max	DCR (mΩ)Typ
LFT2312-103Y	10	200	2.3	188
LFT2312-153Y	15	310	1.9	279
LFT2312-273Y	27	530	1.4	440
LFT2312-393Y	39	800	1.2	698
LFT2312-473Y	47	970	1.1	804
LFT2312-683Y	68	1440	0.9	1100
LFT2312-104Y	100	2100	0.7	1810

#### PHYSICAL CHARACTERISTICS



#### WINDING



- Rated voltage: 250VAC max@40°C
- Insulation voltage: 1500VAC,2S(line-line)
- Inductor Testing: HP4284A (Equivalent acceptable)  
DCR: WK3260B
- Storage Temperature: -40°C to +40°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat:260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- All specifications subject to change without notice.

# POWER LINE CHOKES

## LFT2312V SERIES



### FEATURES:

- High inductance with low resistance
- High pulse-handling capability
- Approx. 2% stray inductance for symmetrical interference suppression

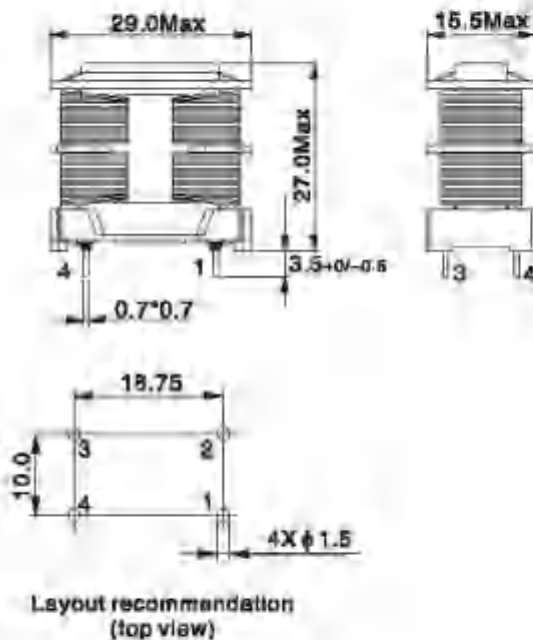
### APPLICATIONS:

- Electronic ballasts for lamps
- Switch-mode power applications
- Suppression of common-mode and differential-mode Interferences

### ELECTRICAL CHARACTERISTICS@25°C

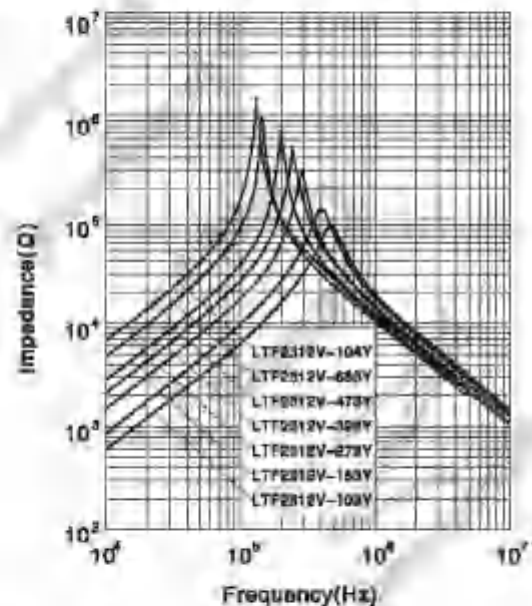
Part Number	Inductance (mH)10KHz,0.1mA +50%/-30%	Lk (uH) typ.	DC Current (A)Max	DCR (mΩ)Max	Test voltage (Vac) line to line
LTF2312V-104Y	100	2100	0.7	1810	2000
LTF2312V-683Y	68	1440	0.9	1100	2000
LTF2312V-473Y	47	970	1.1	804	2000
LTF2312V-393Y	39	800	1.2	696	2000
LTF2312V-273Y	27	550	1.4	440	2000
LTF2312V-153Y	15	310	1.9	279	2000
LTF2312V-103Y	10	210	2.3	188	2000

### PHYSICAL CHARACTERISTICS



### IMPEDANCE VS FREQUENCY

Measured with windings in parallel at +20°C, typical values



- Rated voltage: 300Vac,50/60Hz
  - Inductance Testing: 10KHz 0.1mA
  - Operating temperature: -40°C to +105°C
  - Storage Temperature: -25°C to +40°C, <75%RH
  - Temperature Rise Max:40°C
  - Insulation resistance 100MΩ Min DC 500V
  - Resistance to soldering heat:260°C for 10 seconds
- Note:All specifications subject to change without notice.

