



CURRENT SENSE TRANSFORMER ACST-XXXX

FEATURES:

- Conform to Class B insulation System
- Dielectric Strength 3000vrms
- Split Bobbin Design
- Small Physical Package For Tight Configurations
- UL approved Class B Insulation System
- Cost Effective

OPTIONS:

- Bulk packaging is standard
- Custom design available

COMMON APPLICATIONS:

- Protection current transformer
- Testing protection system
- Electronical monitoring system

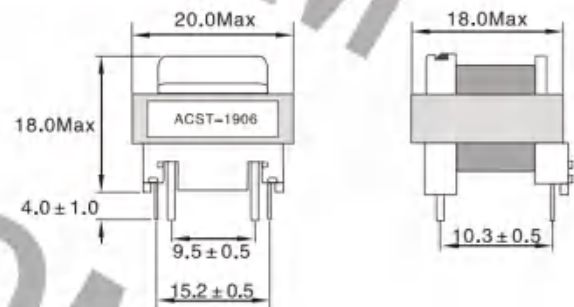
ELECTRICAL CHARACTERISTICS

Part No	Turns Ratio	Current Range	Typical Output (mv/A)	Primary Resistance (μ Ohms)max	Sense Resistance (Ohms) $\pm 10\%$	Sense Inductance (H) $\pm 30\%$	Primary Sense Frequency (Hz)
ACST-1901	1/50	1-30A	32	800	0.198	0.008	50-200
ACST-1902	1/100	1-30A	64	800	0.785	0.025	50-200
ACST-1903	1/150	1-30A	90	800	1.7	0.06	50-200
ACST-1904	1/200	1-30A	120	800	3.2	0.12	50-200
ACST-1905	1/300	1-30A	140	800	7.4	0.27	50-200
ACST-1906	1/500	1-30A	110	800	20	0.73	50-200
ACST-1907	1/1000	1-30A	60	800	79	2.4	50-200
ACST-1908	1/1500	1-30A	45	800	220	5.2	50-200

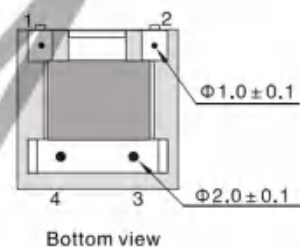
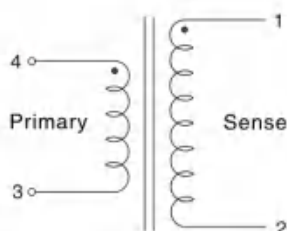
TECHNICAL INFORMATION

- Terminal Leads (1A,2A)Strip Enamel Coating
- Typical Output Test Condition: Input 10A/50Hz,60Ohm Load
- Sense inductance Test Condition:100Hz/1V
- Creepage Distance Between Primary And Sense is More Than 5mm,But The Creepage Distance Can Be Changed To 8mm For Special Requirement
- Operating temperature: Primary Current 0.4 to 30A -40°Cto 70°C, Primary Current Range 0.4 to 20A -40°C to 85°C
- Storage temperature:-40°C to 85°C

MECHANICAL DIMENSIONS

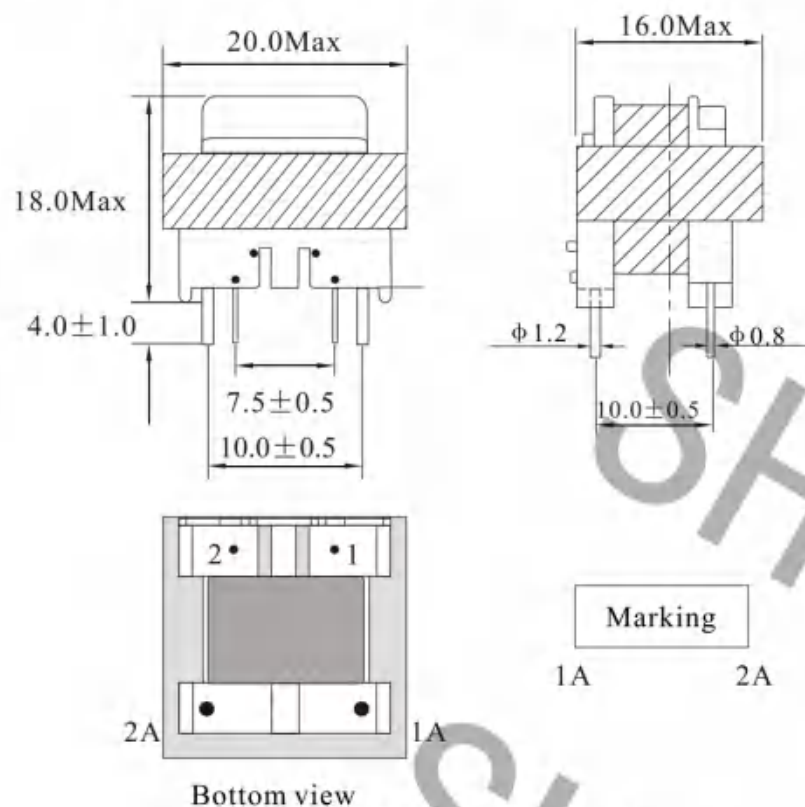


POLARITY INDICATION

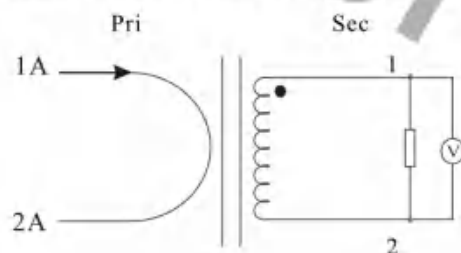


Note: All dimensions in mm
Unless otherwise specified all tolerances are ± 0.3 mm.

1. PHYSICAL CHARACTERISTICS (mm)



2. ELECTRICAL SCHEMATIC



NOTES:

Temp 20°C 48%RH
RoHS Compliant

3. ELECTRICAL SPECIFICATIONS

Model Number	Current ratio	Accuracy	Linearity	Output @ 50/60Hz
ACST014-681	680:1	±2%	<1%	2.2Vrms
ACST014-102	1000:1	±2%	<1%	3.2Vrms
ACST014-152	1500:1	±2%	<1%	4.7Vrms
ACST014-252	2500:1	±2%	<1%	7.9Vrms
ACST014A-681	680:1	±5%	<5%	2.2Vrms
ACST014A-102	1000:1	±5%	<5%	3.2Vrms
ACST014A-152	1500:1	±5%	<5%	4.7Vrms
ACST014A-252	2500:1	±5%	<5%	7.9Vrms

Hi-Pot: 2.5kVrms, 50/60Hz, 10S Winding to Winding

Hi-Pot: 1.25kVrms, 50/60Hz, 10S Winding to Core

Operating Temperature: -30~95°C

Storage Temperature: -50~125°C

NAME:	Current Sensor			
CUSTOMER P/N:		DATE:	2013-01-08	
SHINHOM P/N:	ACST014 Series	REV:	A0	PAGE
DRAWN BY	CHECKED BY		APPROVE BY	

CURRENT SENSE TRANSFORMERS

ACST02 SERIES

FEATURES:

- Fully encapsulated for optimal PC board mounting
- Frequency range from 20KHz to 200KHz
- Primary current rating to 30 Amps
- Primary to secondary isolated to 2500 or 4000VAC
- Meets VDE norms
- Optimum performance over designated current and frequency range
- Competitive pricing due to high volume production
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

APPLICATIONS:

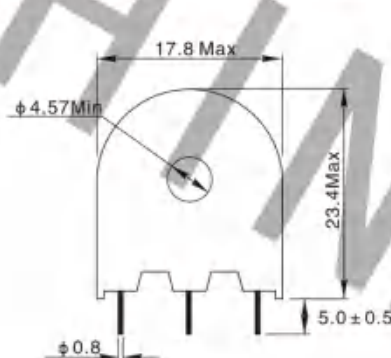
- Isolated current feed-back signal in Switch Mode Power Supplies
- Motor current load/overload
- Lighting
- Switch Controls Ultra-sound current
- High resolution sonar current
- Isolated bi-directional current sensor with full wave bridge rectifier



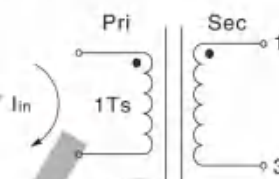
ELECTRICAL CHARACTERISTICS@25°C

Part Number	Turns ratio	Sec inductance (mH)Min.	Sec DCR (Ω)Max	Isec Max ⁽¹⁾	Volt uS Max ⁽²⁾	winding
ACST02-500	1:50	5	0.6	300mA	175	A
ACST02-101	1:100	22	1.1	150mA	350	A
ACST02-201	1:200	89	4.5	75mA	700	A
ACST02-301	1:300	200	10.0	50mA	900	A
ACST02-501	1:500	560	25.0	30mA	1500	A
ACST02-751	1:750	1260	43.0	40mA	3750	A
ACST02-500CT	1:50CT	5	0.3/0.3	300mA	175	B
ACST02-101CT	1:100CT	22	0.55/0.55	150mA	350	B
ACST02-201CT	1:200CT	89	2.25/2.25	75mA	700	B
ACST02-301CT	1:300CT	200	10.0/5.0	50mA	900	B
ACST02-501CT	1:500CT	560	12.5/12.5	30mA	1500	B
ACST02-751CT	1:750CT	1260	21.5/21.5	40mA	3750	B

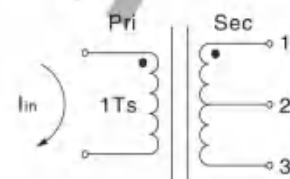
PHYSICAL CHARACTERISTICS & WINDING



Schematic A



Schematic B



Notes

1. For Prim./Sec. Ratios of 1:50 through 1:500, the Isec value corresponds to a maximum primary current of 15 Amp-turns rms while the Isec value for the ratio of 1:750 corresponds to a max. primary current of 30 Amp-turns rms.
2. $VuS = R_t \times I_s \times 1/2F$
 R_t (Ohms) : Recommended Terminating Resistance
 I_s (A) : Secondary Current
 F (Hz) : Frequency
3. Secondary inductance tested at 10KHz and 10mV for 1:50 through 1:500 Prim./Sec. Ratios and 1KHz/10mV for Prim./Sec. ratio of 1:750
4. Ambient temperature range: -40°C to +120°C.
5. Electrical specifications at 25°C.
6. Pin# 2 is on Center-Tapped (CT) versions only

CURRENT TRANSFORMERS

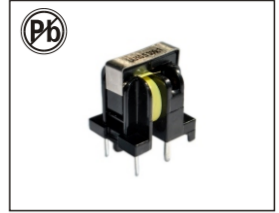
ACST11 SERIES

FEATURES:

- Conform to Class B insulation System
- Dielectric Strength 3000vrms
- Split Bobbin Design
- Small Physical Package For Tight Configurations
- UL approved Class B Insulation System
- Cost Effective

APPLICATIONS:

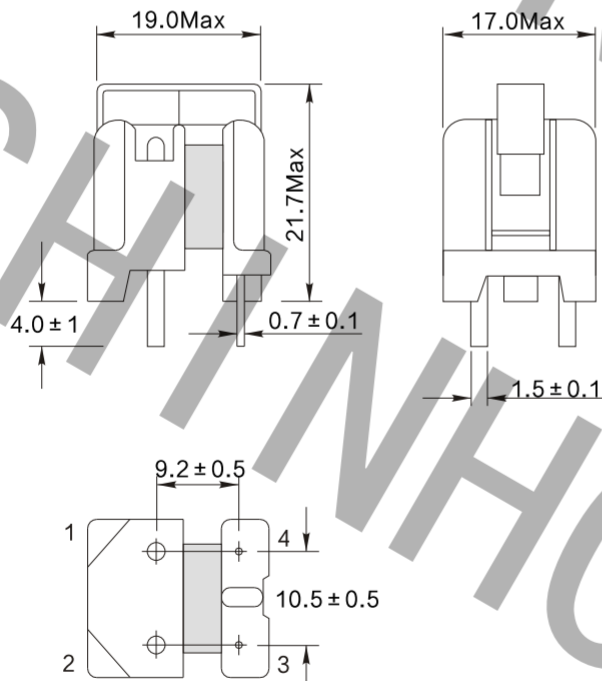
- Protection current transformer
- Testing protection system
- Electronical monitoring system



ELECTRICAL CHARACTERISTICS@25°C

Part Number	Turns	Sec inductance Ls (mH)Ref	DCR Rs (Ω)Max	Pri current (A)	Sec wire diameter (mm)
ACST11-101	100	40.0	1.1	30	0.25
ACST11-151	150	90	2.0	28	0.23
ACST11-201	200	160	3.5	27	0.20
ACST11-301	300	360	7.5	25	0.17
ACST11-501	500	750	19	19	0.14
ACST11-701	700	1500	47	13	0.1
ACST11-102	1000	3000	104	12	0.08
ACST11-152	1500	6800	230	10	0.06

PHYSICAL CHARACTERISTICS & WINDING



- Operating temperature : -0°C to 85°C
- Storage temperature Component: -25°C to +85°C
- Secondary inductance test at 10kHz, 0.1 Vrms
- Measuring frequency at 10KHz to 1MHz
- Electrical specifications at 25°C

Note:All specifications subject to change without notice.

CURRENT SENSE TRANSFORMERS

ACST19 SERIES

FEATURES:

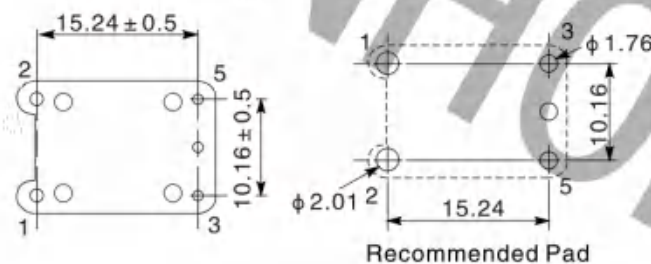
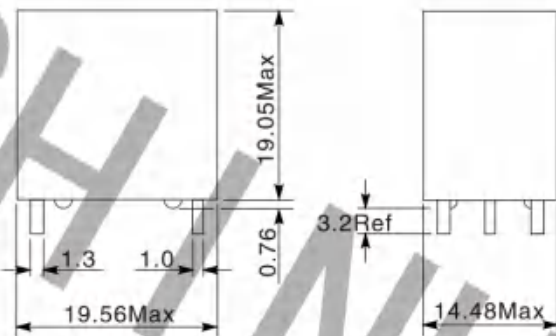
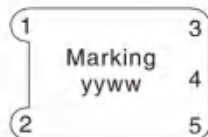
- Meets requirements of IEC 950 and VDE norms
UL94V-0 recognized materials
- Operating frequency range from 20KHz to 200KHz
- Epoxy encapsulated construction



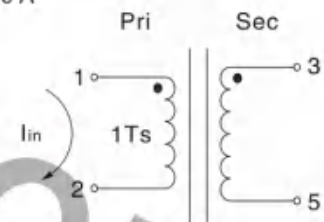
ELECTRICAL CHARACTERISTICS@25°C

Part Number	Turns ratio	Sec inductance (3-5) (mH)Min.	Sec DCR (3-5) (Ω)Max	Isec Max ①	Volt uS Max ②	winding
ACST19-500	1:50	5	0.65	300mA	175	A
ACST19-101	1:100	20	1.3	150mA	350	A
ACST19-201	1:200	80	4.5	75mA	700	A
ACST19-500CT	1:50CT	5	0.65	300mA	175	B
ACST19-101CT	1:100CT	20	1.3	150mA	350	B
ACST19-201CT	1:200CT	80	4.5	75mA	700	B

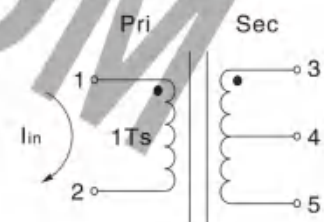
PHYSICAL CHARACTERISTICS & WINDING



Schematic A



Schematic B



Notes

1. Isec value corresponds to a maximum primary current of 15 Amp-turns rms
2. $VuS = R_t \times I_s \times 1/2F$
 R_t (Ohms) : Recommended Terminating Resistance
 I_s (A) : Secondary Current
 F (Hz) : Frequency
3. Secondary inductance tested at 10KHz and 10mV
4. Ambient temperature range: -40°C to +120°C.
5. Electrical specifications at 25°C.
6. Pin# 4 is on Center-Tapped (CT) versions only

Note: All specifications subject to change without notice.

CURRENT SENSE TRANSFORMERS

ACST20 SERIES

FEATURES:

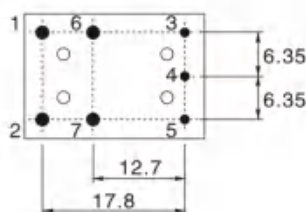
- Meets requirements of IEC 950 and VDE norms
UL94V-0 recognized materials
- Operating frequency range from 20KHz to 200KHz
- Epoxy encapsulated construction



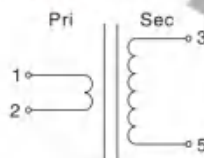
ELECTRICAL CHARACTERISTICS@25°C

Part Number	Turns ratio	Sec inductance (mH)Min.	Sec DCR (Ω)Max	Isec ① Max	Volt uS Max ②	winding
ACST20-500	1:50	5	0.65	300mA	175	A
ACST20-101	1:100	20	1.3	150mA	350	A
ACST20-201	1:200	80	4.5	75mA	700	A
ACST20-500CT	1:50CT	5	0.65	300mA	175	B
ACST20-101CT	1:100CT	20	1.3	150mA	350	B
ACST20-201CT	1:200CT	80	4.5	75mA	700	B
ACST20A-500	1:1:50	5	0.65	300mA	175	C
ACST20A-101	1:1:100	20	1.3	150mA	350	C
ACST20A-201	1:1:200	80	4.5	75mA	700	C
ACST20A-500CT	1:1:50CT	5	0.65	300mA	175	D
ACST20A-101CT	1:1:100CT	20	1.3	150mA	350	D
ACST20A-201CT	1:1:200CT	80	4.5	75mA	700	D

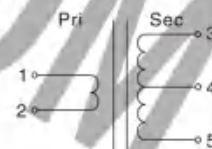
PHYSICAL CHARACTERISTICS & WINDING



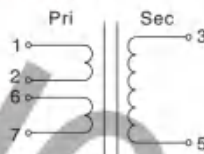
Schematic A



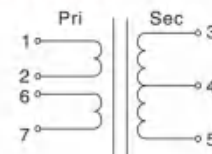
Schematic B



Schematic C



Schematic D



Notes

1. Isec value corresponds to a maximum primary current of 15 Amp-turns rms
2. $VuS = R_t \times I_s \times 1/2F$
 R_t (Ohms) : Recommended Terminating Resistance
 I_s (A) : Secondary Current
 F (Hz) : Frequency
3. Secondary inductance tested at 10KHz and 10mV
4. Ambient temperature range: -40°C to +120°C.
5. Electrical specifications at 25°C.
6. Pin# 4 is on Center-Tapped (CT) versions only
7. Pin#6, #7 is on ACST20A versions only

CURRENT SENSE TRANSFORMERS

ACST2019 SERIES



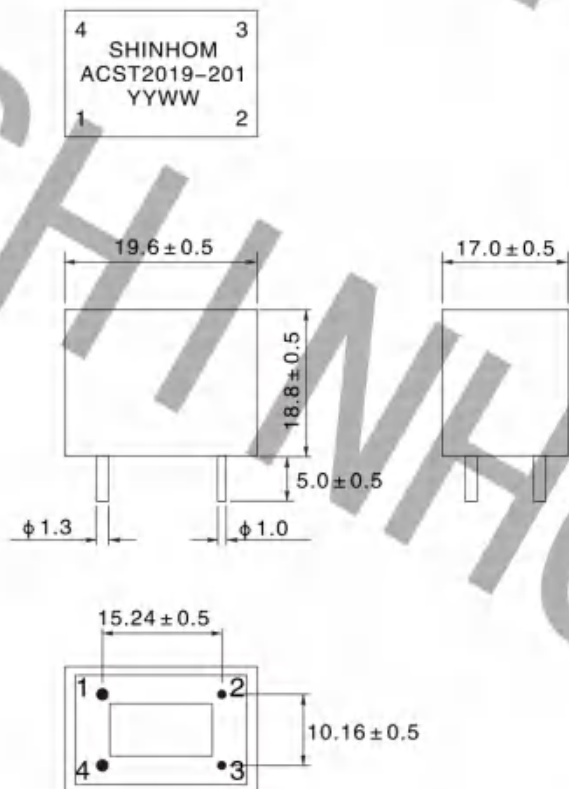
FEATURES:

- 3750VDC insulation between winding to winding
- Frequency range: 10kHz to 1MHz
- Designed for use with switching power supplies
- This current sensing transformers are designed to meet UL/CSA/IEC 60950 Reinforced Insulation specification and provide 3 mm creepage/clearance between primary and secondary windings. Winding to winding
- Reinforced insulation per IEC 380
- Epoxy encapsulated construction
- Materials meet requirement of UL94V-0

ELECTRICAL CHARACTERISTICS@25°C

Part Number	Turns ratio	Sec inductance 15.75KHz,1V (mH)Min.	Sec DCR (Ω)Max	IPK (A)	Terminating resistance R_T (Ω)
ACST2019-500	1:50	5	0.7	35	50
ACST2019-101	1:100	20	1.4	37	100
ACST2019-201	1:200	80	4.5	38	200
ACST2019-301	1:300	180	11.0	37	300

PHYSICAL CHARACTERISTICS & WINDING



Notes

- Inductance is for the secondary, measured at 15.75 kHz, 1 Vrms.
- Volt-time product is for the secondary, based on 2000 Gauss.
- Terminating resistance (R_T) value is based on 1 Volt output with 35 Amps flowing through the primary. Varying terminating resistance increases or decreases output Voltage/Ampere according to the following equation: $R_T = V_{out} \times N_{sec} / I_{in}$.
- The maximum useable peak sense current (I_{PK}) depends on temperature rise or core saturation, which should be evaluated for the operating conditions.
- Ambient temperature range: -40°C to +85°C.
- Electrical specifications at 25°C.

Note: All specifications subject to change without notice.

SHINHOME ELECTRONICS ENTERPRISE CO.,LTD. No.8,YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

CURRENT SENSING TRANSFORMER

CT05 SETRIES

FEATURES:

- UL/C-UL recognized components
- 3000Vrms gate to drive winding test
- Useful operating frequency from 50kHz to 500kHz
- Most popular winding configurations



Electrical Specifications @ 25 °C Operating Temperature -40 °C to 130 °C

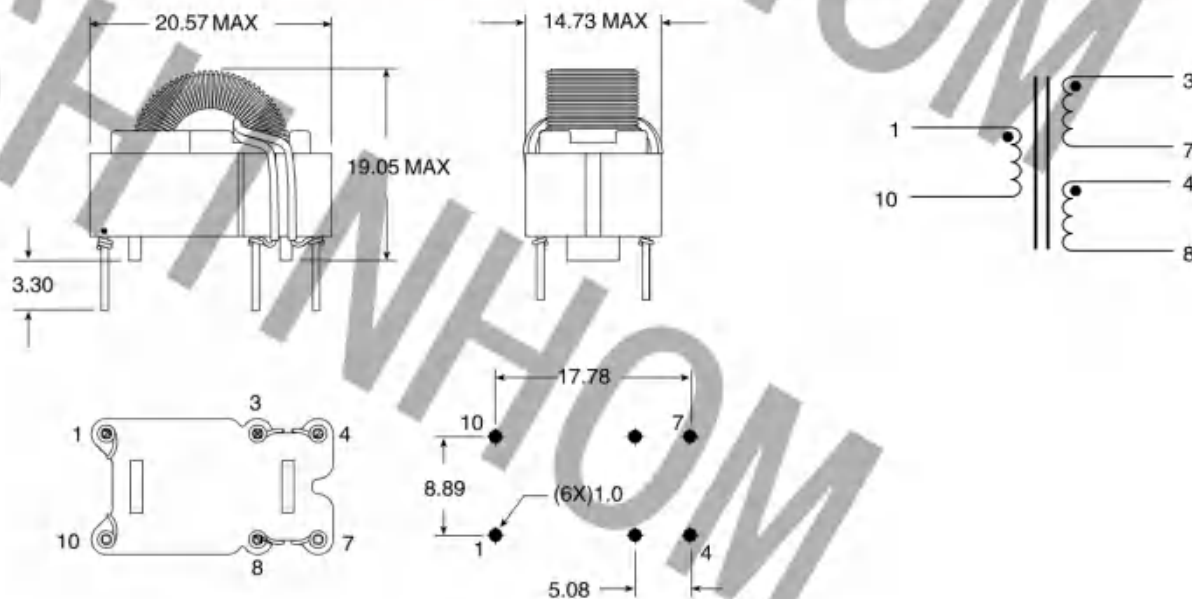
Part Number	Turns Ratio	Primary Inductance (1-10) (mH MIN)	DCR Pri (1-10)(Ω Max)	DCR Sec1 (3-7)(mΩ ± 15%)	DCR Sec2 (4-8)(mΩ ± 15%)	Hi-Pot (Pri-Sec) (Vrms)
CT0581	200:1:1	76	2.8	1.7	1.7	3000
CT0582	100:1:1	19	1.4	1.7	1.7	3000
CT0583	50:1:1	5	0.7	1.7	1.7	3000

Additional Specifications

Part Number	Reference Data				Calculation Data	
	RT	Ipk (Amps)	Droop (%)	Max Flux Density	Kb	Req (mΩ)
CT0581	200	34	1.00	2000	17.12	.9
CT0582	100	35	1.98	2000	68.49	.8
CT0583	15	36	1.19	2000	273.97	.75

- NOTES: 1. These current sense transformers have two one turn primaries that can be used in parallel. The listed current ratings are for parallel connection.
2. The reference values are for an application using the termination resistor (Rt) and operating with unipolar waveform at 100kHz, 40% duty cycle. The estimated temperature rise is 55 °C .
3. The peak flux density should remain below 2100 Gauss to ensure that the core does not saturate. Use the following formula to calculate the peak flux density: $B_{pk} = K_b \cdot I_{pk} \cdot R_t \cdot \text{don} / (F_f \cdot \text{Freq. in kHz})$ where: Rt is the terminating resistor in the application and Ff is 1 for unipolar waveform and 2 for bipolar waveform
4. To calculate the droop: Droop Exponent (D) = $R_t \cdot \text{don} / (L_{pri} \text{ in mH} \cdot \text{Freq. in kHz})$ %Droop = $(1 - e^{-D}) \cdot 100$
5. The temperature rise of the component is calculated based on the total core loss and copper loss:
- A. To calculate total copper loss (W): $P_{cu} = I_{pk}^2 \cdot R_{eq} \cdot F_f \cdot \text{don}$ where: Ff is 1 for unipolar waveform and 2 for bipolar waveform
- B. To calculate total core loss (W): $P_{core} = 0.000073 \cdot (\text{Freq. in kHz})^{1.67} \cdot (B_{op} \text{ in kG})^{2.532}$ where: $B_{op} \text{ in kG} = K_b \cdot I_{pk} \cdot R_t \cdot \text{don} / (2000 \cdot \text{Freq. in kHz})$
- C. To calculate temperature rise: Temperature Rise (C) = $60.18 \cdot (\text{Core Loss(W)} + \text{Copper Loss (W)})^{.533}$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



SUGGESTED PCB HOLE PATTERN

CURRENT SENSE TRANSFORMER

CT11XX SERIES



FEATURES:

- * Current sense transformers provide output feedback to the pulse control circuitry allowing low-cost regulation of switch-mode power supplies
- * 25A Rated primary current(40A Max)
- * 500kHz maximum frequency

APPLICATIONS:

- * switch-mode power supplies
- * lighting
- * switch controls

CONSTRUCTION:

- * Fully encapsulated construction

Electrical specification @ 25°C Operating temperature: -40°C to +125°C

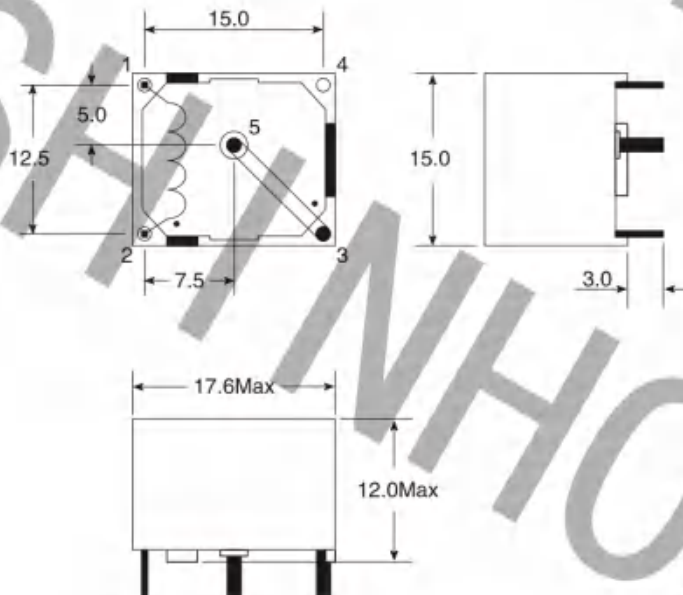
Part No.	Prim/Sec Ratio	Sec L (mH MIN)	Sec DCR (MAX)	V x T (MAX)
CT1151	1:50	4.7	0.5	175uVs
CT1152	1:100	18	2.0	350uVs
CT1153	1:200	76	4.5	700uVs
CT1154	1:500	470	16.0	1750uVs
CT1155	1:1000	1900	50.0	3500uVs

NOTES:

L: Inductance:(2-1)tested at 10KHz&10mV
 $V \times T : V = R_t \times I_s$ $T = 1/2F$

$R_t(\Omega)$: Recommended terminating resistance
 $I_s(A)$: Sec. current $F(Hz)$: Frequency

Mechanical



Pin3&5: ϕ 1.2mm

Pin1&2: ϕ 0.5mm

Unless otherwise specified,all tolerance are ± 0.5

Note:All specifications subject to change without notice.

Schematic



- Insulation resistance: 500V DC >100M Ω
- Hi-Pot: 4000V 1mA 60S
- Temperature range: -25°C to +85°C
- Storage Temperature: -40°C to +105°C
- Resistance to soldering heat:260°C for 10 seconds
- Marking: Part number and date code

HIGH FREQUENCY CURRENT SENSING TRANSFORMER ACST SETRIES

FEATURES:

- Meets UL94-V0 Requirements
- Precise Current Sensing

COMMON APPLICATIONS:

- SMPS Control Circuits
- Current Sensing
- Switching power regulators
- Pulse current test



STANDARD SPECIFICATIONS @250C

Part Number	SCHEMATIC	TURNS ($\pm 1\%$ Max)	OCL (mH Min)	DCR (Ω Max)	ET (V- μ SEC-Min)
ACST-001	2A	50	5.0	0.7	150
ACST-002	2A	100	20.0	1.40	300
ACST-003	2A	200	80.0	4.50	600
ACST-004	2A	300	180.0	11.0	900
ACST-005	2B	50CT	5.0	0.7	150
ACST-006	2B	100CT	20.0	1.40	300
ACST-007	2B	200CT	80.0	4.50	600
ACST-008	2B	300CT	180.0	11.0	900

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

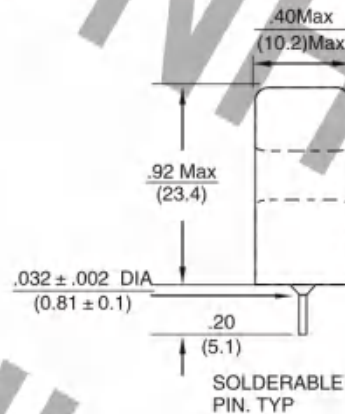
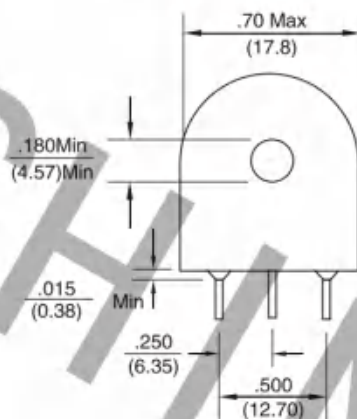


FIG.2A

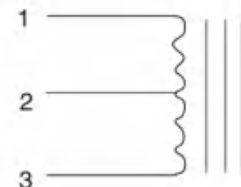


FIG.2B

- Working Frequency range:10KHz~1MHz
- Testing Frequency: 10 KHz 0.1VRMS
- Hipot:2000VAC,Primary to Secondary
- Maximum Sensing Current: 20A p-p
- All secondary measurements are in pins 1-3
- Soldering menthods: Wave,Reflow
- Operating Temperature:0°C to 85°C
- Storage Temperature:-25°C to 85°C

Note:All specifications subject to change without notice

CURRENT SENSE TRANSFORMERS

ACST02 SERIES

FEATURES:

- Fully encapsulated for optimal PC board mounting
- Frequency range from 20KHz to 200KHz
- Primary current rating to 30 Amps
- Primary to secondary isolated to 2500 or 4000VAC
- Meets VDE norms
- Optimum performance over designated current and frequency range
- Competitive pricing due to high volume production
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

APPLICATIONS:

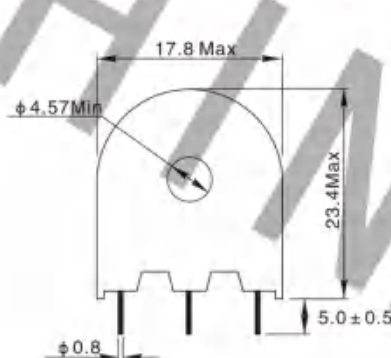
- Isolated current feed-back signal in Switch Mode Power Supplies
- Motor current load/overload
- Lighting
- Switch Controls Ultra-sound current
- High resolution sonar current
- Isolated bi-directional current sensor with full wave bridge rectifier



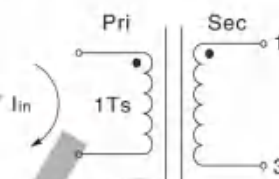
ELECTRICAL CHARACTERISTICS@25°C

Part Number	Turns ratio	Sec inductance (mH)Min.	Sec DCR (Ω)Max	Isec Max ⁽¹⁾	Volt uS Max ⁽²⁾	winding
ACST02-500	1:50	5	0.6	300mA	175	A
ACST02-101	1:100	22	1.1	150mA	350	A
ACST02-201	1:200	89	4.5	75mA	700	A
ACST02-301	1:300	200	10.0	50mA	900	A
ACST02-501	1:500	560	25.0	30mA	1500	A
ACST02-751	1:750	1260	43.0	40mA	3750	A
ACST02-500CT	1:50CT	5	0.3/0.3	300mA	175	B
ACST02-101CT	1:100CT	22	0.55/0.55	150mA	350	B
ACST02-201CT	1:200CT	89	2.25/2.25	75mA	700	B
ACST02-301CT	1:300CT	200	10.0/5.0	50mA	900	B
ACST02-501CT	1:500CT	560	12.5/12.5	30mA	1500	B
ACST02-751CT	1:750CT	1260	21.5/21.5	40mA	3750	B

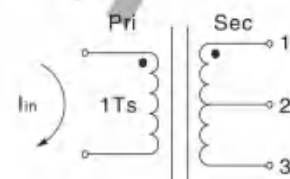
PHYSICAL CHARACTERISTICS & WINDING



Schematic A



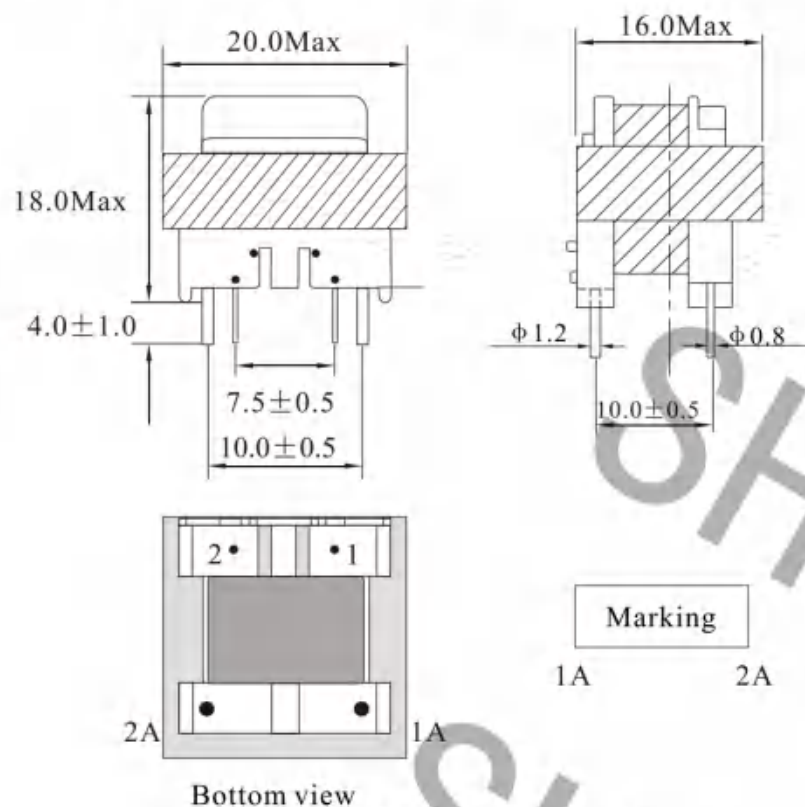
Schematic B



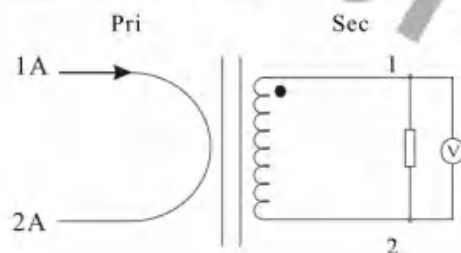
Notes

1. For Prim./Sec. Ratios of 1:50 through 1:500, the Isec value corresponds to a maximum primary current of 15 Amp-turns rms while the Isec value for the ratio of 1:750 corresponds to a max. primary current of 30 Amp-turns rms.
2. $VuS = R_t \times I_s \times 1/2F$
 R_t (Ohms) : Recommended Terminating Resistance
 I_s (A) : Secondary Current
 F (Hz) : Frequency
3. Secondary inductance tested at 10KHz and 10mV for 1:50 through 1:500 Prim./Sec. Ratios and 1KHz/10mV for Prim./Sec. ratio of 1:750
4. Ambient temperature range: -40°C to +120°C.
5. Electrical specifications at 25°C.
6. Pin# 2 is on Center-Tapped (CT) versions only

1. PHYSICAL CHARACTERISTICS (mm)



2. ELECTRICAL SCHEMATIC



NOTES:

Temp 20°C 48%RH
RoHS Compliant

3. ELECTRICAL SPECIFICATIONS

Model Number	Current ratio	Accuracy	Linearity	Output @ 50/60Hz
ACST014-681	680:1	±2%	<1%	2.2Vrms
ACST014-102	1000:1	±2%	<1%	3.2Vrms
ACST014-152	1500:1	±2%	<1%	4.7Vrms
ACST014-252	2500:1	±2%	<1%	7.9Vrms
ACST014A-681	680:1	±5%	<5%	2.2Vrms
ACST014A-102	1000:1	±5%	<5%	3.2Vrms
ACST014A-152	1500:1	±5%	<5%	4.7Vrms
ACST014A-252	2500:1	±5%	<5%	7.9Vrms

Hi-Pot: 2.5kVrms, 50/60Hz, 10S Winding to Winding

Hi-Pot: 1.25kVrms, 50/60Hz, 10S Winding to Core

Operating Temperature: -30~95°C

Storage Temperature: -50~125°C

NAME:	Current Sensor			
CUSTOMER P/N:		DATE:	2013-01-08	
SHINHOM P/N:	ACST014 Series	REV:	A0	PAGE
DRAWN BY	CHECKED BY		APPROVE BY	

CURRENT SENSE TRANSFORMERS

ACST19 SERIES

FEATURES:

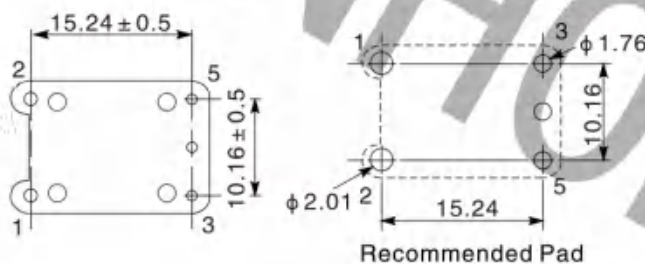
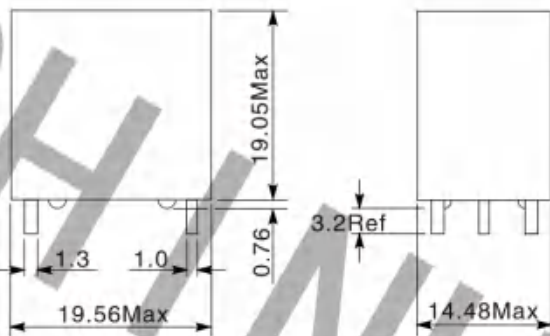
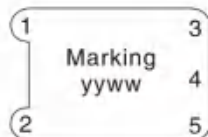
- Meets requirements of IEC 950 and VDE norms
UL94V-0 recognized materials
- Operating frequency range from 20KHz to 200KHz
- Epoxy encapsulated construction



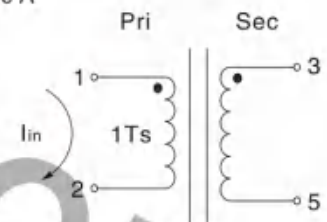
ELECTRICAL CHARACTERISTICS@25°C

Part Number	Turns ratio	Sec inductance (3-5) (mH)Min.	Sec DCR (3-5) (Ω)Max	Isec Max ①	Volt uS Max ②	winding
ACST19-500	1:50	5	0.65	300mA	175	A
ACST19-101	1:100	20	1.3	150mA	350	A
ACST19-201	1:200	80	4.5	75mA	700	A
ACST19-500CT	1:50CT	5	0.65	300mA	175	B
ACST19-101CT	1:100CT	20	1.3	150mA	350	B
ACST19-201CT	1:200CT	80	4.5	75mA	700	B

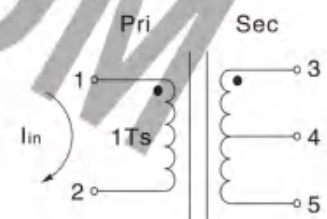
PHYSICAL CHARACTERISTICS & WINDING



Schematic A



Schematic B



Notes

1. Isec value corresponds to a maximum primary current of 15 Amp-turns rms
2. $VuS = R_t \times I_s \times 1/2F$
 R_t (Ohms) : Recommended Terminating Resistance
 I_s (A) : Secondary Current
 F (Hz) : Frequency
3. Secondary inductance tested at 10KHz and 10mV
4. Ambient temperature range: -40°C to +120°C.
5. Electrical specifications at 25°C.
6. Pin# 4 is on Center-Tapped (CT) versions only

Note: All specifications subject to change without notice.

CURRENT SENSE TRANSFORMERS

ACST20 SERIES

FEATURES:

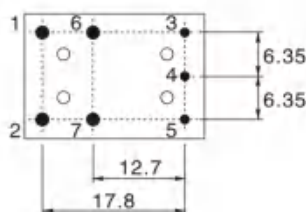
- Meets requirements of IEC 950 and VDE norms
UL94V-0 recognized materials
- Operating frequency range from 20KHz to 200KHz
- Epoxy encapsulated construction



ELECTRICAL CHARACTERISTICS@25°C

Part Number	Turns ratio	Sec inductance (mH)Min.	Sec DCR (Ω)Max	Isec ^① Max	Volt uS ^② Max	winding
ACST20-500	1:50	5	0.65	300mA	175	A
ACST20-101	1:100	20	1.3	150mA	350	A
ACST20-201	1:200	80	4.5	75mA	700	A
ACST20-500CT	1:50CT	5	0.65	300mA	175	B
ACST20-101CT	1:100CT	20	1.3	150mA	350	B
ACST20-201CT	1:200CT	80	4.5	75mA	700	B
ACST20A-500	1:1:50	5	0.65	300mA	175	C
ACST20A-101	1:1:100	20	1.3	150mA	350	C
ACST20A-201	1:1:200	80	4.5	75mA	700	C
ACST20A-500CT	1:1:50CT	5	0.65	300mA	175	D
ACST20A-101CT	1:1:100CT	20	1.3	150mA	350	D
ACST20A-201CT	1:1:200CT	80	4.5	75mA	700	D

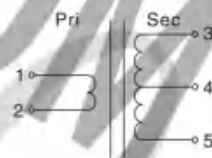
PHYSICAL CHARACTERISTICS & WINDING



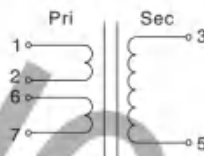
Schematic A



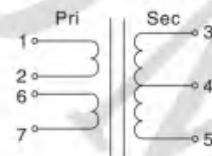
Schematic B



Schematic C



Schematic D



Notes

1. Isec value corresponds to a maximum primary current of 15 Amp-turns rms
2. $VuS = R_t \times I_s \times 1/2F$
 R_t (Ohms) : Recommended Terminating Resistance
 I_s (A) : Secondary Current
 F (Hz) : Frequency
3. Secondary inductance tested at 10KHz and 10mV
4. Ambient temperature range: -40°C to +120°C.
5. Electrical specifications at 25°C.
6. Pin# 4 is on Center-Tapped (CT) versions only
7. Pin#6, #7 is on ACST20A versions only

THROUGH-HOLE HIGH FREQUENCY CURRENT TRANSFORMER ACST010F/FH SERIES

FEATURES:

- Low profile, directly to PCB.
- PBT 94V0 Case
burn-resistant epoxy resin, stable.
- Ferrite core

COMMON APPLICATIONS:

- High frequency pulse current detection
- Switching power supply circuit protection



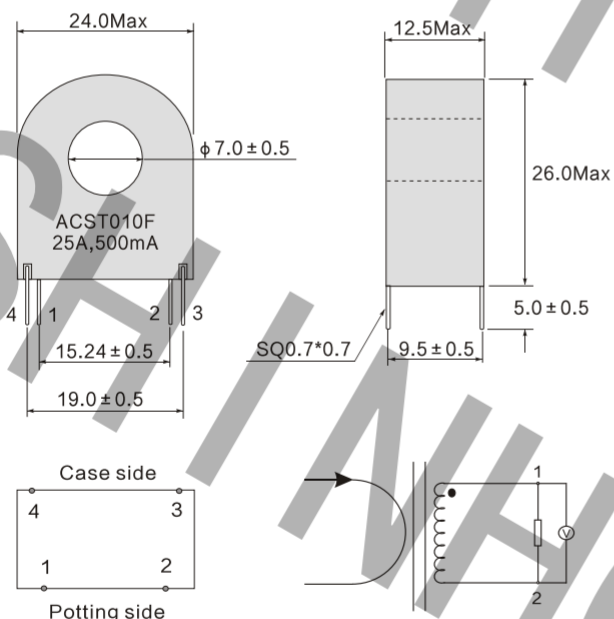
ELECTRICAL CHARACTERISTICS:

Part Number	Turns ratio	Rated input (A)	Rated output (mA)	Hi-Pot (Vdc)
ACST010F/FH-25A-500mA	1:50	25	500	3500
ACST010F/FH-30A-300mA	1:100	30	300	3500
ACST010F/FH-40A-200mA	1:200	40	200	3500
ACST010F/FH-50A-167mA	1:300	50	167	3500
ACST010F/FH-50A-125mA	1:400	50	125	3500
ACST010F/FH-50A-100mA	1:500	50	100	3500
ACST010F/FH-50A-25mA	1:2000	50	25	3500

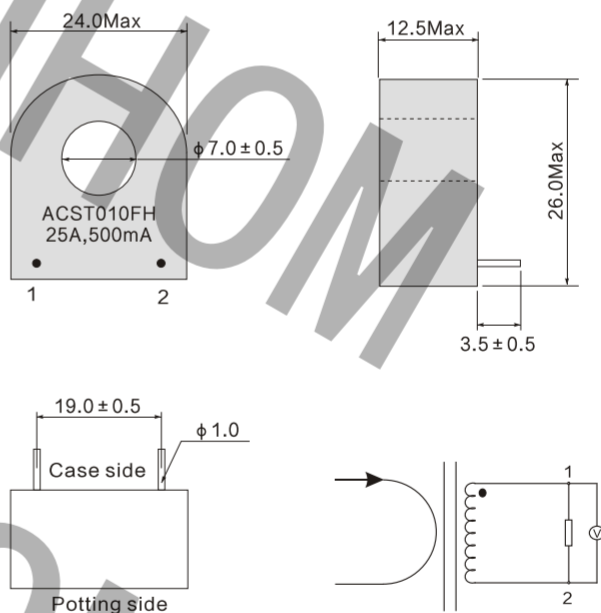
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm

ACST010F



ACST010FH



- Working Frequency range 2KHz~500KHz
- Hi-Pot : 3500V, 1mA, 60S
- Temperature range: -20°C to +70°C
- Storage Temperature: -30°C to +80°C

Note: All specifications subject to change without notice.

Current Sense Transformer

ACSTE4.2 SERIES

FEATURES:

- AEC-Q200 Grade 1 (40°C to +125°C)
- Miniature SMT design, only 4.5 × 4.8mm footprint
- 500Vrms, one minute isolation (hipot) between windings
- Designed for use up to 1MHz and above to sense continuous currents to 7 Amps

APPLICATIONS:

- Switching power supplies
- Feedback control
- Overload sensing
- Load drop/Shut down detection



ELECTRICAL SPECIFICATIONS:

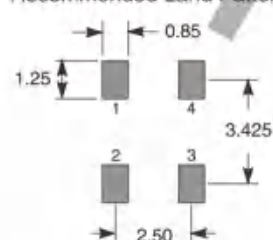
Part No.	Turns ratio	Ls (uH, Min) 100KHz, 0.1V	Rp (Ω, Max)	Rs (Ω, Max)	Sensed Current (A)	Frequency range (KHz)	Volt-time product (Vμsec)	Rt (Ω)
ACSTE4.2-200	1:20	33	0.003	0.35	7	83-1000	6	2.9
ACSTE4.2-300	1:30	74	0.003	0.9	7	56-1000	9	4.3
ACSTE4.2-400	1:40	132	0.003	1.6	7	42-1000	12	5.7
ACSTE4.2-500	1:50	205	0.003	2.5	7	33-1000	15	7.1
ACSTE4.2-600	1:60	295	0.003	3.6	7	28-1000	18	8.6
ACSTE4.2-700	1:70	400	0.003	4.6	7	24-1000	21	10
ACSTE4.2-101	1:100	820	0.003	9.5	7	17-1000	30	14.3
ACSTE4.2-121	1:125	1280	0.003	13.0	7	13-1000	37.5	17.9
ACSTE4.2-151	1:150	1800	0.003	21.0	7	11-1000	45	21.4

MECHANICAL:

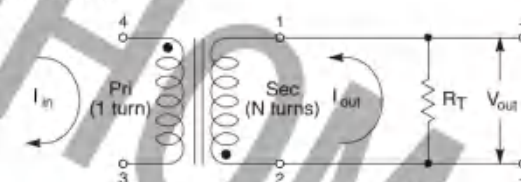
Unit:mm



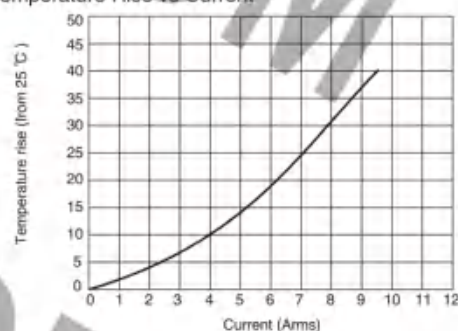
Recommended Land Pattern



Schematic



Temperature Rise vs Current



NOTES

- 1.Primary current of 7 A causes less than 25°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise
- 2.Ambient temperature 40°C to +125°C
- 3.Maximum part temperature +165°C (ambient + temp rise)
- 4.Storage temperature Component: 40°C to +165°C
- 5.Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
- 6.Electrical specifications at 25°C
- 7.Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
- 8.DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

Current Sense Transformer

ACSTE4.6 SERIES



FEATURES:

- Very low DC resistance
- Different turns ratios
- Very small package
- 500Vrms, one minute isolation (hipot) between windings
- Sensed Current – primary rated for 20 Amps

APPLICATIONS:

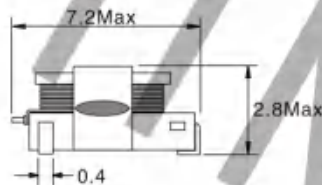
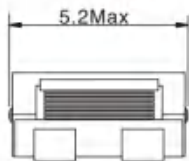
- Switching power supplies
- Feedback control
- Overload sensing
- Load drop/Shut down detection

ELECTRICAL SPECIFICATIONS:

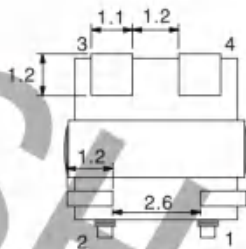
Part No.	Turns ratio	Ls (μ H, Min) 100KHz, 0.1V	Rp (Ω , Max)	Rs (Ω , Max)	Sensed Current (A)
ACSTE4.6-200	1:20	53	0.0015	0.42	9
ACSTE4.6-500	1:50	333	0.0015	2.76	9
ACSTE4.6-700	1:70	652	0.0015	5.04	9
ACSTE4.6-101	1:100	1330	0.0015	10.68	9
ACSTE4.6-151	1:150	2993	0.0015	22.30	9

MECHANICAL:

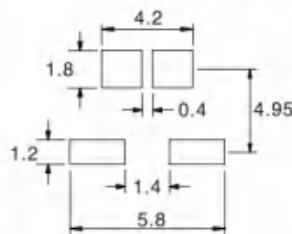
Unit:mm



Schematic



Bottom view



Recommended PCB layout

NOTES

- 1.Primary current of 9 A causes less than 35°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise
- 2.Operating temperature : -40°C to 125°C
- 3.Storage temperature Component: -40°C to +125°C
- 4.Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
- 5.Measuring Frequency: @50KHz to 1MHz
- 6.Electrical specifications at 25°C
- 7.Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
- 8.DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

Current Sense Transformer

ACSTE5.0 SERIES

FEATURES:

- Very low DC resistance
- Different turns ratios
- Small package
- Other pinning on request

APPLICATIONS:

- Switching power supplies
- Feedback control
- Overload sensing
- Load drop/Shut down detection

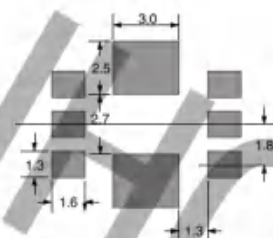
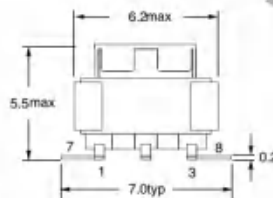
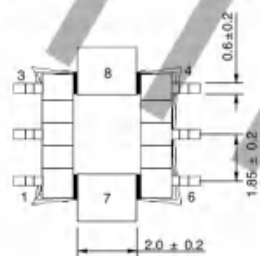
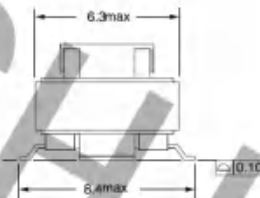
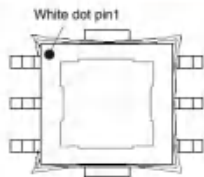


ELECTRICAL SPECIFICATIONS:

Part No.	Turns ratio	L_s (μH , Min) 100KHz, 0.1V	R_p (Ω , Max)	R_s (Ω , Max)	Sensed Current (A)
ACSTE5.0-200	1:20	80	0.0007	0.4	10
ACSTE5.0-300	1:30	180	0.0007	0.87	10
ACSTE5.0-400	1:40	320	0.0007	1.14	10
ACSTE5.0-500	1:50	500	0.0007	1.85	10
ACSTE5.0-600	1:60	730	0.0007	2.3	10
ACSTE5.0-700	1:70	980	0.0007	4.75	10
ACSTE5.0-101	1:100	2000	0.0007	5.5	10
ACSTE5.0-121	1:125	3000	0.0007	11.5	10

MECHANICAL:

Unit:mm



Recommended Land Pattern

Schematic



NOTES

1. Operating temperature : $-40^{\circ}C$ to $125^{\circ}C$
2. Storage temperature Component: $-40^{\circ}C$ to $+125^{\circ}C$
3. Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
4. Electrical specifications at $25^{\circ}C$
5. Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
6. DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

Current Sense Transformer

ACSTE8.3 SERIES



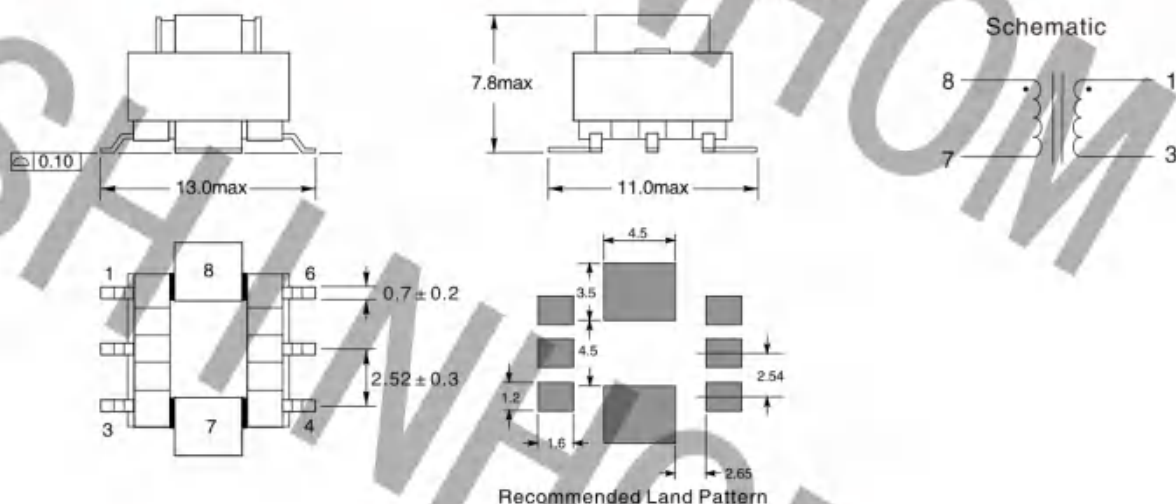
APPLICATIONS:

- Power supply for VTRs
- Small surface mount current sensors
- Sensed current up to 30A; Frequency range up to 1MHz
- Very low primary DC resistance
- 1.5KV AC/3mA / 1S isolation (hipot) between windings

ELECTRICAL SPECIFICATIONS:

Part No.	Turns ratio	Ls (mH, Min) 100KHz, 0.1V	Rp (Ω, Max)	Rs (Ω, Max)	Sensed Current (A)
ACSTE8.3-200	1:20	0.22	0.0039	0.21	30
ACSTE8.3-300	1:30	0.5	0.0039	0.32	30
ACSTE8.3-400	1:40	0.88	0.0039	0.50	30
ACSTE8.3-500	1:50	1.4	0.0039	0.65	30
ACSTE8.3-600	1:60	2.0	0.0039	0.81	30
ACSTE8.3-700	1:70	2.7	0.0039	1.0	30
ACSTE8.3-800	1:80	3.5	0.0039	1.3	30
ACSTE8.3-101	1:100	5.6	0.0039	2.0	30
ACSTE8.3-121	1:125	8.7	0.0039	5.2	30
ACSTE8.3-151	1:150	12.6	0.0039	6.5	30
ACSTE8.3-201	1:200	22.0	0.0039	8.0	30

MECHANICAL: Unit:mm



NOTES

- 1.High Current – primary rated for 30 Amps
- 2.Operating temperature : -40℃ to 125℃
- 3.Storage temperature Component: -40℃ to +125℃
- 4.Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
- 5.Operating Frequency Range up to 100KHz
- 6.Electrical specifications at 25℃
- 7.Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
- 8.DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

SMT CURRENT SENSE TRANSFORMERS

ACSTE11 SERIES

FEATURES:

- Height: 10mm Max
- Footprint: 12.5mm X 11.5mm Max
- Frequency range: 50KHz to 500KHz
- Primary rated current: 30A
- Operating temperature: -40°C to +125°C



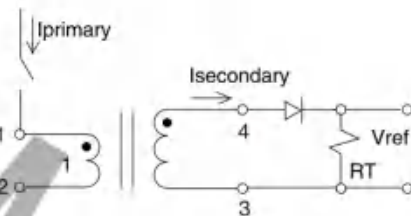
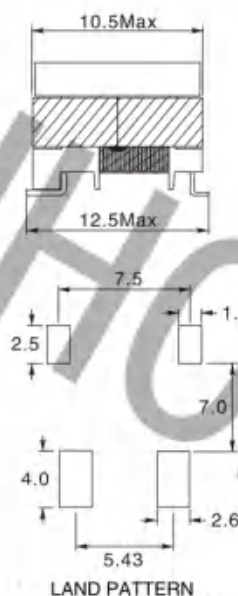
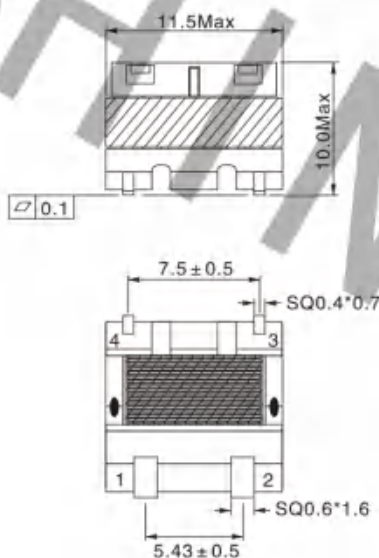
ELECTRICAL CHARACTERISTICS:

Part Number	Turns ratio	Sec. Inductance (mH) 10KHz, 0.1V	DCR		Hi-Pot (Vrms)
			Pri (mΩ)Max	Sec (Ω)Max	
ACSTE11-200	1:20	0.27min.	0.8	0.36	500
ACSTE11-300	1:30	0.61min.	0.8	0.53	500
ACSTE11-400	1:40	1.08min.	0.8	1.12	500
ACSTE11-500	1:50	1.68min.	0.8	1.41	500
ACSTE11-600	1:60	2.43min.	0.8	1.70	500
ACSTE11-700	1:70	3.30min.	0.8	2.00	500
ACSTE11-800	1:80	4.32min.	0.8	2.30	500
ACSTE11-101	1:100	6.75min.	0.8	2.90	500
ACSTE11-121	1:125	10.5min.	0.8	3.70	500
ACSTE11-151	1:150	15.2min.	0.8	4.50	500
ACSTE11-201	1:200	27.0min.	0.8	8.10	500

1. The temperature of component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.

PHYSICAL CHARACTERISTICS & WINDING

Dimension: mm



APPLICATION CIRCUIT

Unless otherwise specified, all tolerances are $\pm 0.25\text{mm}$

SMT CURRENT SENSE TRANSFORMERS

ACST12 35A SEIRES

FEATURES:

- Height: 10mm Max
- Footprint: 19.9mm X 15.0mm Max
- Frequency range: 50KHz to 100KHz
- Current rating: up to 35A
- Operating temperature: -40°C to +130°C

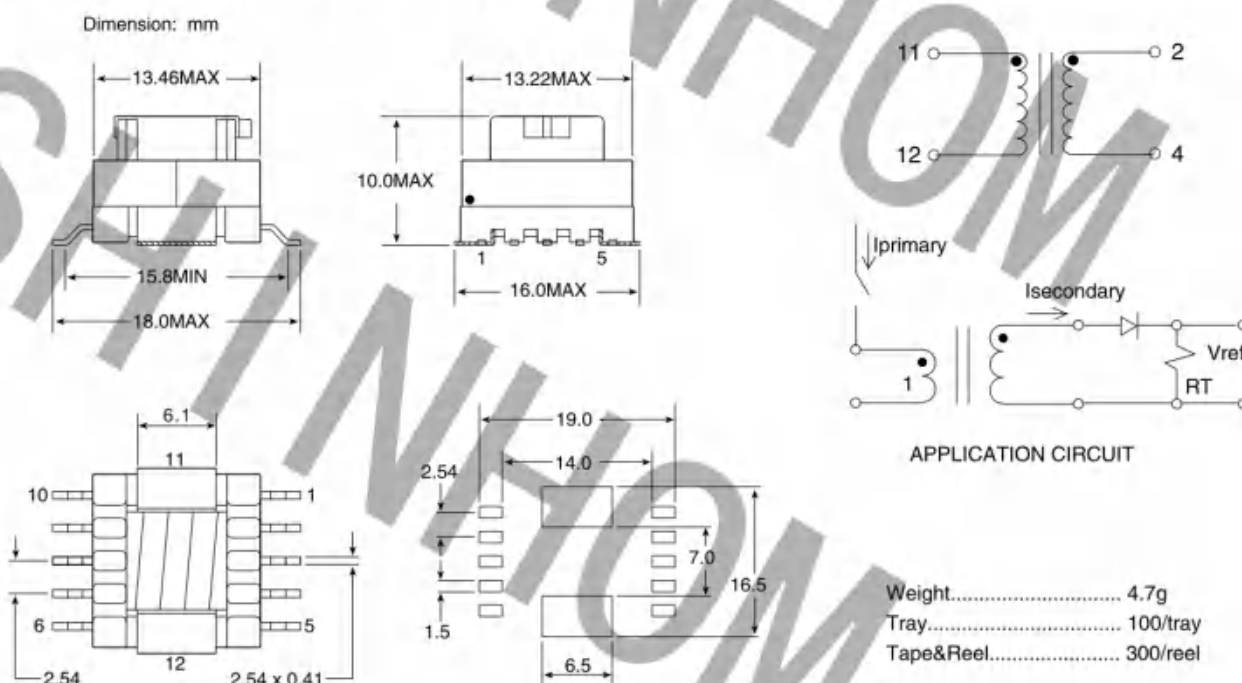


ELECTRICAL CHARACTERISTICS:

Part Number	Turns ratio	Sec. Inductance (mH) 10KHz,0.1V	DCR		Hi-Pot (Vrms)
			Pri (mΩ)Max	Sec (Ω)Max	
ACSTE12030	1:30	0.5min.	0.45	0.34	500
ACSTE12050	1:50	1.4min.	0.45	0.57	500
ACSTE12070	1:70	2.7min.	0.45	0.8	500
ACSTE12100	1:100	5.6min.	0.45	1.5	500
ACSTE12200	1:200	22.0min.	0.45	5.0	500
ACSTE12300	1:300	50.0min.	0.45	12.0	500

1. The temperature of component (ambient temperature plus temper-ature rise) must be within the specified operating temperature range.
2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.

PHYSICAL CHARACTERISTICS & WINDING



Unless otherwise specified, all tolerances are ± 0.25mm

SMT CURRENT SENSE TRANSFORMERS

ACST12 40A SEIRES

FEATURES:

- Height: 10mm Max
- Footprint: 19.9mm X 15.0mm Max
- Frequency range: 50KHz to 500KHz
- Current rating: up to 40A
- Operating temperagure: -40°C to +130°C

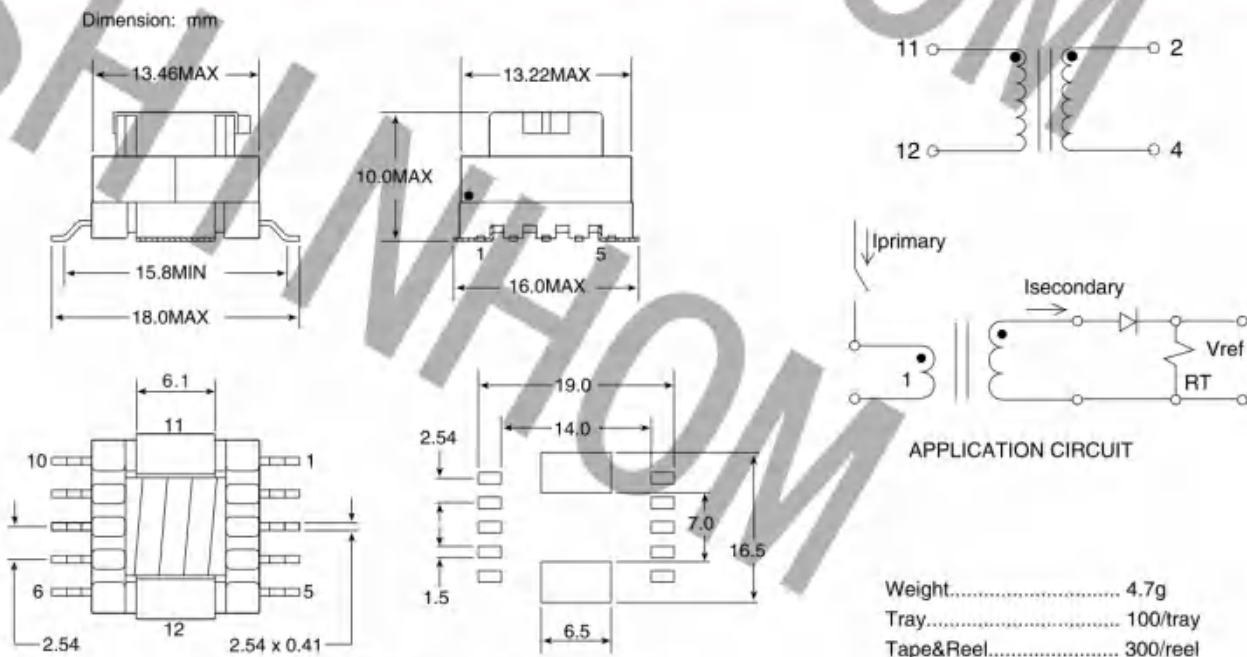


ELECTRICAL CHARACTERISTICS:

Part Number	Turns ratio	Sec. Inductance (mH) 10KHz,0.1V	DCR		Hi-Pot (Vrms)
			Prj (mΩ)Max	Sec (Ω)Max	
ACSTE12-200	1:20	0.34min.	0.36	0.18	500
ACSTE12-300	1:30	0.76min.	0.36	0.265	500
ACSTE12-400	1:40	1.36min.	0.36	0.56	500
ACSTE12-500	1:50	2.12min.	0.36	0.705	500
ACSTE12-600	1:60	3.06min.	0.36	0.85	500
ACSTE12-700	1:70	4.16min.	0.36	1.0	500
ACSTE12-800	1:80	5.44min.	0.36	1.15	500
ACSTE12-101	1:100	8.50min.	0.36	1.45	500
ACSTE12-121	1:125	13.3min.	0.36	1.85	500
ACSTE12-151	1:150	19.2min.	0.36	2.25	500
ACSTE12-201	1:200	34.0min.	0.36	4.06	500

1. The temperature of component (ambient temperature plus temper-aturerise) must be within the specified operating temperature range.
2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.

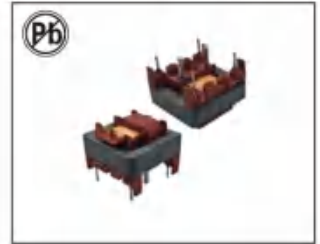
PHYSICAL CHARACTERISTICS & WINDING



Unless otherwise specified, all tolerances are $\pm 0.25mm$

PCB MOUNT CURRENT SENSE TRANSFORMERS

ACSTE20 SERIES



FEATURES:

- Very low DC resistance
- Different turns ratios
- Very small package
- Operating frequency 10KHz to 1MHz
- 1500Vrms or 3000Vrms isolation voltage between windings
- Sensed Current – primary rated for 50 Amps

APPLICATIONS:

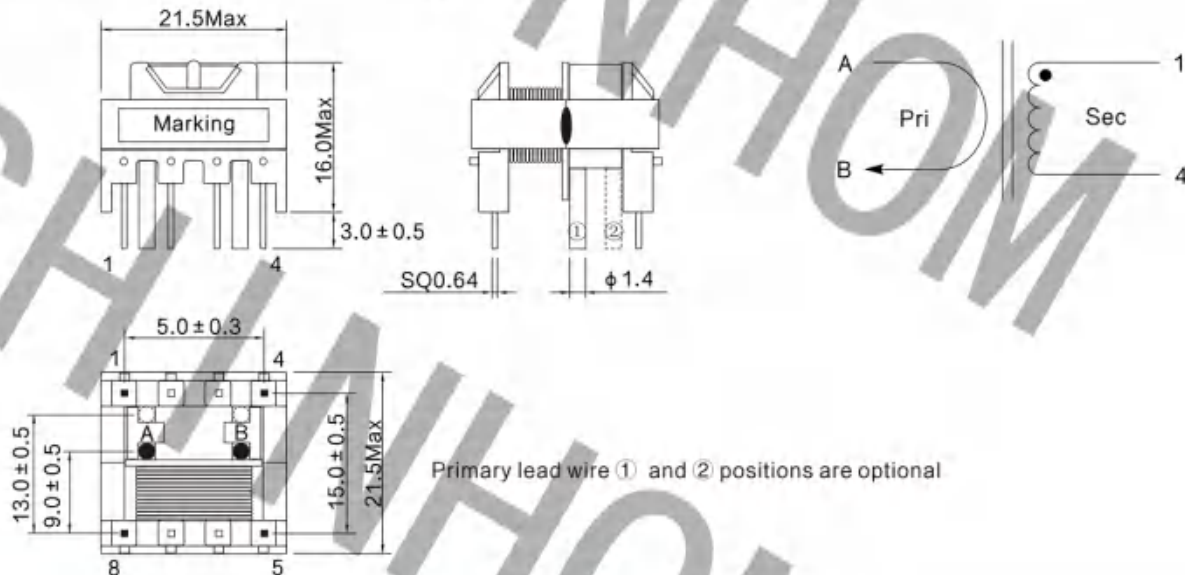
- Switching power supplies
- Feedback control
- Overload sensing
- Load drop/Shut down detection

ELECTRICAL CHARACTERISTICS: @25°C

Part Number	Turns ratio	Sec. Inductance (mH) $\pm 30\%$ 1.0KHz, 1V	DCR Max		Rated input current (A) Max
			Pri(m Ω)	Sec(Ω)	
ACSTE20-500	1:50	5.0	1.0	1.0	50
ACSTE20-101	1:100	20.0	1.0	2.0	50
ACSTE20-201	1:200	80.0	1.0	4.3	50
ACSTE20-301	1:300	180.0	1.0	7.5	50
ACSTE20-501	1:500	500.0	1.0	15.0	50
ACSTE20-102	1:1000	2000.0	1.0	35.0	50

PHYSICAL CHARACTERISTICS & WINDING

Dimension: mm



NOTES

1. Operating temperature : -40°C to 125°C
2. Storage temperature Component: -40°C to +85°C
3. Inductance measured between secondary pins at 1.0kHz, 1Vrms, 0 Adc
4. Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
5. DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

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SMT CURRENT SENSE TRANSFORMERS

ACSTE25 SERIES

FEATURES:

- Very low DC resistance
- Different turns ratios
- Very small package
- 1500Vrms isolation voltage between windings
- Sensed Current – primary rated for 50 Amps

APPLICATIONS:

- Switching power supplies
- Feedback control
- Overload sensing
- Load drop/Shut down detection

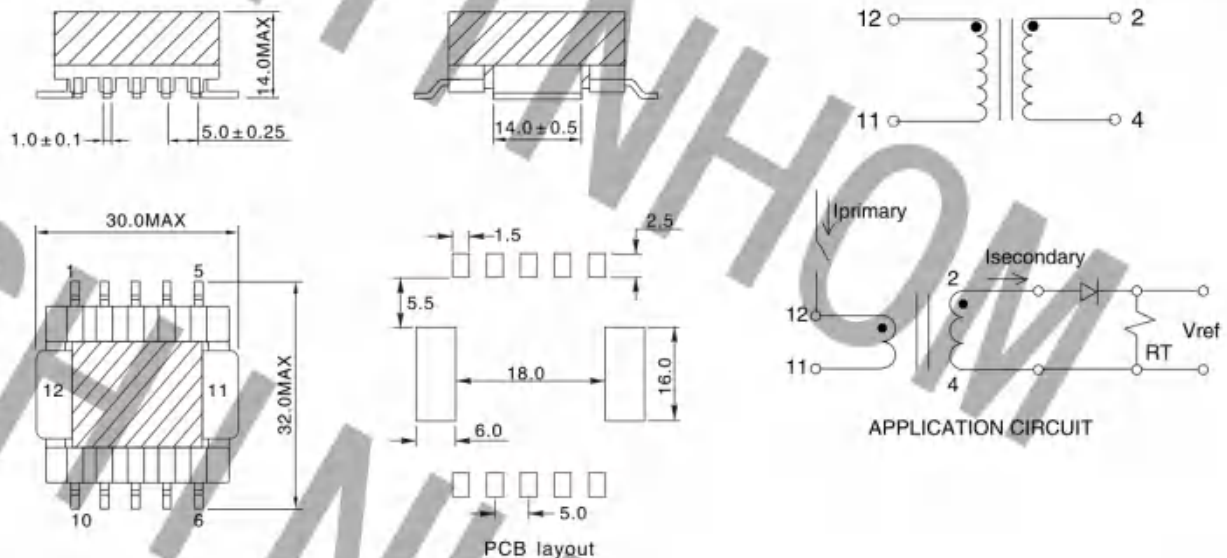


ELECTRICAL CHARACTERISTICS: @25°C

Part Number	Turns ratio	Sec. Inductance (mH) 100KHz, 0.1V	DCR (mΩ) Max		Rated input current (A) Max
			Pri	Sec	
ACSTE2501	1:100	15.0 min.	0.2	1200	50
ACSTE2502	1:150	34.0 min.	0.2	1600	50
ACSTE2503	1:200	60.0 min.	0.2	2000	50

PHYSICAL CHARACTERISTICS & WINDING

Dimension: mm



NOTES

1. Primary current of 50 A causes 40°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise
2. Operating temperature : -55°C to 125°C
3. Storage temperature Component: -40°C to +105°C
4. Tape and reel packaging: -40°C to +80°C
5. Moisture sensitivity level(MSL) 1 (Unlimited floor life at <30deg /85% relative humidity)
6. Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
7. Frequency range: 50KHz to 500KHz
8. Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
9. DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

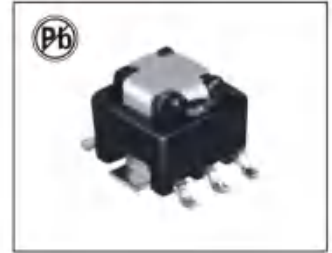
SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.8,YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

SMD CURRENT SENSER TRANSFORMERS

ACSTE50 Series

FEATURES:

- Working Frequency range:50KHz~1MHz
- Testing Frequency: 10 KHz 0.1Vrms
- Hipot:2000VAC,Primary to Secondary
- Maximum Sensing Current: 20A
- All secondary measurements are in pins 1-3
- Soldering methods: Wave, Reflow

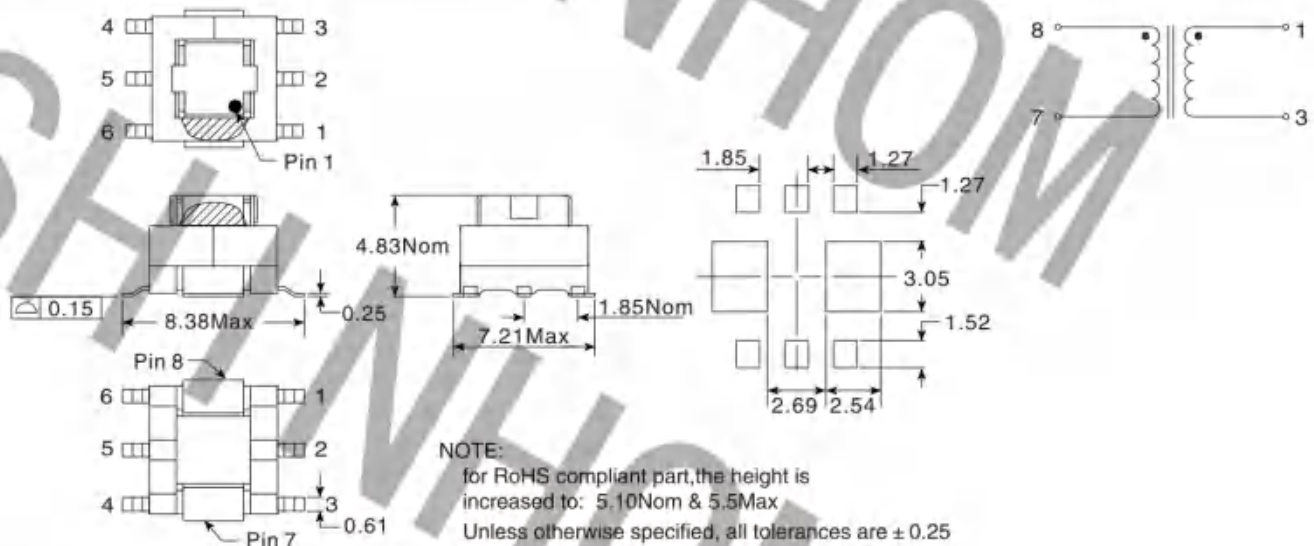


Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C

Part No.	Turns Ratio	Current Rating ² (A)	Secondary inductance (mH)Min	DCR(mΩ Max)		Hi-Pot (Vrms)
				Primary (8-7)	Secondary (1-3)	
ACSTE5020	1:20	20	0.08	0.75	550	500
ACSTE5030	1:30	20	0.18	0.75	870	500
ACSTE5040	1:40	20	0.32	0.75	1140	500
ACSTE5050	1:50	20	0.50	0.75	1500	500
ACSTE5060	1:60	20	0.72	0.75	2250	500
ACSTE5070	1:70	20	0.98	0.75	4750	500
ACSTE5100	1:100	20	2.00	0.75	5500	500
ACSTE5125	1:125	20	3.00	0.75	6500	500

MECHANICAL:

SCHEMATIC:

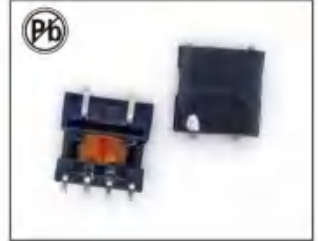


NOTES:

1. The temperature of component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.
3. To calculate value of terminating resistor (Rt) use the following formula: $R_t (\Omega) = V_{ref} \cdot N / (I_{peak_primary})$
4. The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for uni-polar current use following formula: $B_{pk} = 37.59 \cdot V_{ref} \cdot (Duty_Cycle_Max) \cdot 105 / (N \cdot Freq_kHz)$ for bi-polar current applications divide Bpk (as calculated above) by 2

SMT CURRENT SENSE TRANSFORMERS

ACSTEP7 SERIES



FEATURES:

- Very low DC resistance
- Different turns ratios
- Small SMD package
- RoHS compatible
- Insulation distances in compliance with IEC 60664

APPLICATIONS:

- Switch-mode power supplies
- Feedback control
- Overload sensing
- Load drop/shut-down detection

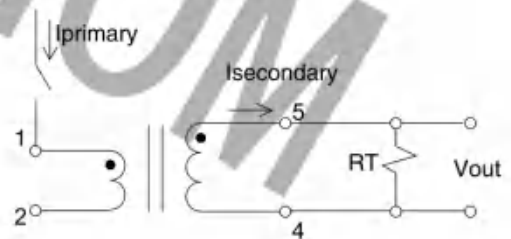
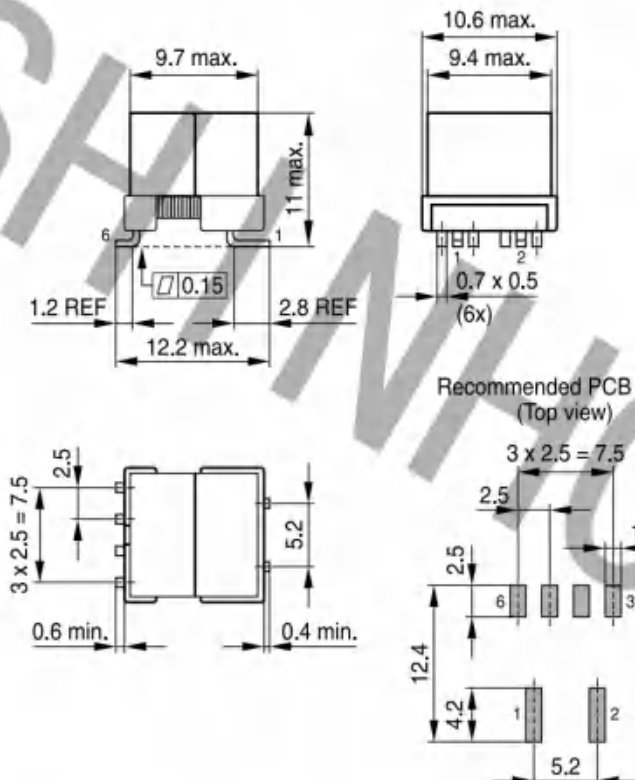
ELECTRICAL CHARACTERISTICS:

Part Number	Turns	Inductance (mH) Min	Voltage-time product +120°C (V.us) (1)	Cp (pF)	R(1-2) (mΩ) Max	R(4-5) (Ω) Max	Rt ⁽²⁾ (Ω) Typ.
ACSTEP7-50	50	1.7	116	4	1.9	2.1	2.5
ACSTEP7-70	70	3.0	163	4	1.9	2.9	3.5
ACSTEP7-100	100	7.0	233	4	1.9	5.0	5.0
ACSTEP7-125	125	11.0	291	4	1.9	5.3	6.0

Notes:

- (1) The maximum volt-second rating limits the peak flux density to 220 mT when used in a unipolar drive application. For bipolar drive applications, a maximum volt-sec of two times is acceptable.
- (2) Burden Resistor value is calculated by taking Vout as 1 V reference and with maximum input current (20 A) flowing through the primary winding of the current sense transformer

PHYSICAL CHARACTERISTICS & WINDING



- Typical frequency range: 50~250KHz
- Inductance test frequency: 20KHz, 0.01V
- High voltage test: 2400VAC, 50Hz, 1s (Coil to Coil)
- The max primary current of 20A causes approx +40°C temperature rise
- Couple capacitance measured at 10kHz, 1V, +25°C
- Operating temperature range -40°C to +150°C

SMT CURRENT SENSE TRANSFORMERS

ACSTEP11 SERIES

FEATURES:

- Very low DC resistance
- Different turns ratios
- Small SMD package
- RoHS compatible
- Qualified to AEC-Q200
- Insulation distances in compliance with IEC61558-2-16

APPLICATIONS:

- Switch-mode power supplies
- Feedback control
- Overload sensing
- Load drop/shut-down detection
- Switching current detection in on-board DC/DC converter and chargers



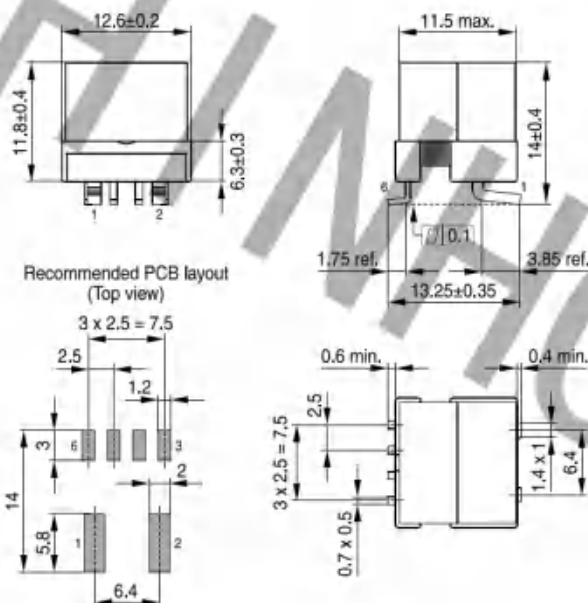
ELECTRICAL CHARACTERISTICS:

Part Number	Turns ratio	Inductance (mH) 20KHz,0.01V	Voltage-time product +120°C (V.us) (1)	Cp (pF) 10KHz,1V	R(1-2) (mΩ) Max	R(4-5) (Ω) Max	Rt (2) (Ω) Typ.
ACSTEP11-50	1:50	1.2 Min	117	4	0.5	1.5	1.6
ACSTEP11-70	1:70	2.8 Min	164	4	0.5	2.1	2.3
ACSTEP11-100	1:100	6.5 Min	235	4	0.5	3.1	3.3
ACSTEP11-125	1:125	7.5 Min	294	4	0.5	4.1	4.1
ACSTEP11-180	1:180	18.0 Min	423	4	0.5	7.4	6.0
Small air gap ensures tighter tolerance of inductance for better sensing accuracy							
ACSTEP11-100A	1:100	2.5 ± 12%	235	4	0.5	3.1	3.3

Notes:

- (1)The maximum volt-second rating limits the peak flux density to 220 mT when used in an unipolar drive application. For bipolar drive applications, a maximum volt-sec of two times is acceptable.
- (2)Burden Resistor value is calculated by taking Vout as 1 V reference and with maximum input current flowing through the input (30 A).

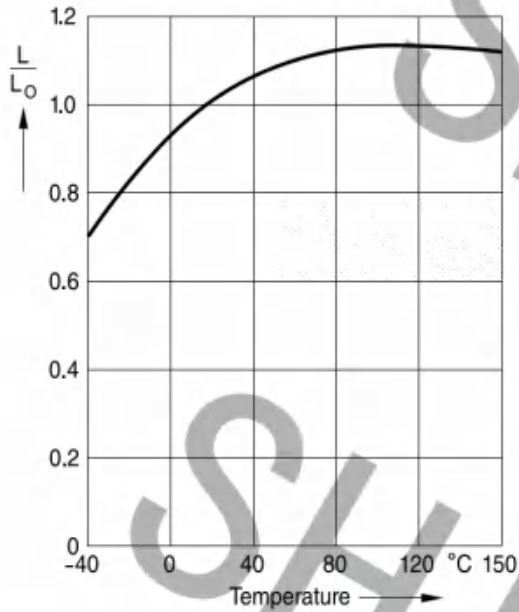
PHYSICAL CHARACTERISTICS & WINDING



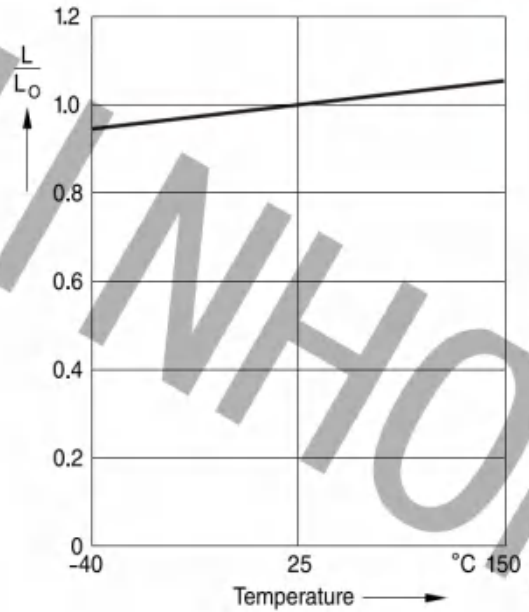
- Typical frequency range: 50~400KHz
- Inductance test frequency: 20KHz,0.01V
- High voltage test: 2500VAC,50Hz,1s (Pri to Sec, Core)
- The primary current of 30A causes approx +40°C temperature rise
- Couple capacitance measured at 10kHz, 1V, +25°C
- Operating temperature range -40°C to +150°C

INDUCTANCE L AS A FUNCTION OF TEMPERATURE TYPICAL CURVES

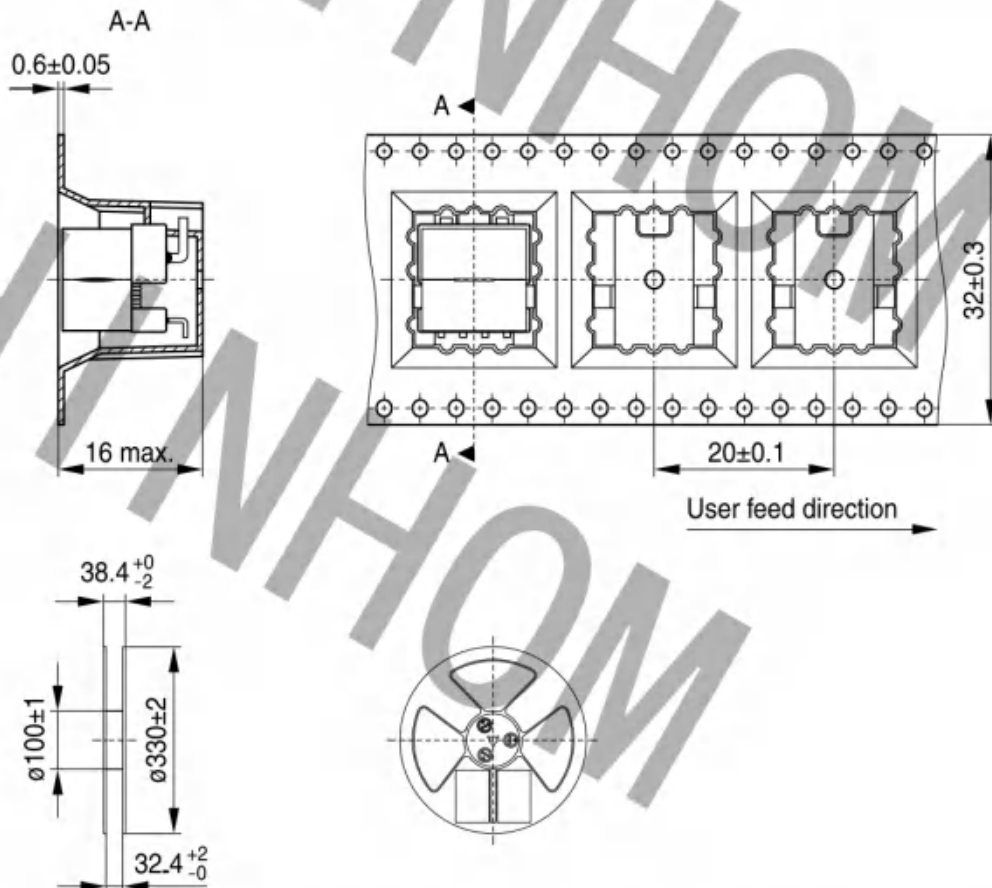
Parts without air gap according
N(4-5) L/Lo vs. Temperature



Parts with air gap according
N(4-5) L/Lo vs. Temperature



TAPING AND PACKING



Current Sense Transformer

CT02 SERIES

FEATURES:

- Smallest Footprint
- Hi-Pot tested at 1500VAC
- Current ratings to 18A
- Patent pending

APPLICATION:

- DC/DC Converters
- DC/DC Converters
- POL Converters

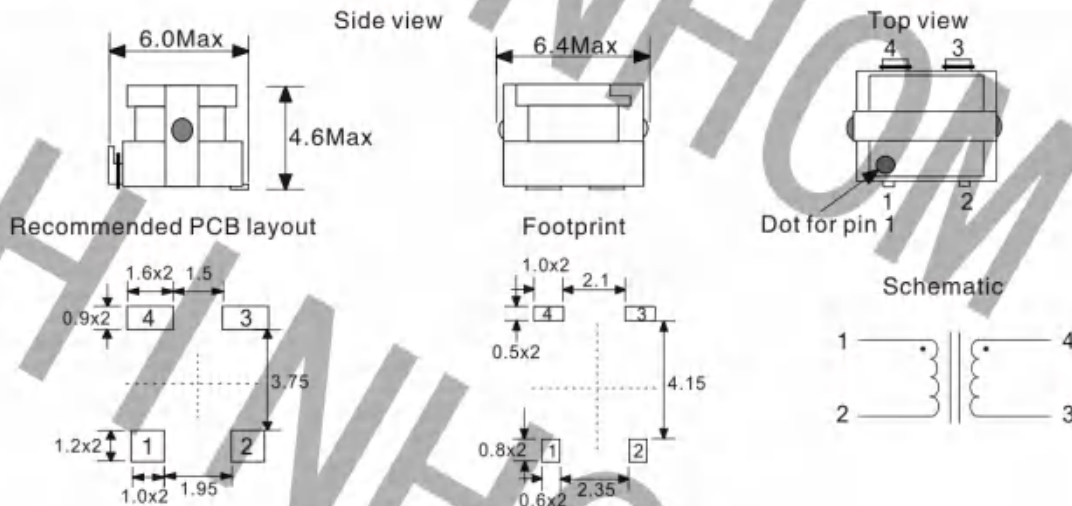


ELECTRICAL SPECIFICATIONS:

Part No.	Turns ratio	E-T Product (V-us)	Ls (mH, Min)	Rs (Ω , Max)	Current rating (A)	Hi-Pot (Vac)
CT02-050	1:50	4.0	0.44	1.25	15.0	1500
CT02-100	1:100	8.0	1.8	4.8	18.0	1500
CT02-150	1:150	12.0	4.0	15.0	18.0	1500
CT02-200	1:200	16.0	7.1	25.0	18.0	1500
CT02-250	1:250	20.0	11.1	37.2	18.0	1500

Note: 1. K= $\pm 10\%$, M= $\pm 20\%$

MECHANICAL: Unit:mm



NOTES

1. Tested at 10kHz, 0.1Vrms.
2. Electrical specifications at 25°C
3. Operating range: -40 °C to +130 °C. This is a combination of ambient plus temperature rise.
4. Meets UL94V-0.
5. DC current through primary, plus turns-ratio-divided DC current through secondary winding, to cause a 40°C temperature rise at 25°C ambient.
6. All products are RoHS-compliant

Specifications subject to change without notice

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SMD CURRENT TRANSFORMER

ACSTER11.5 Series

Features

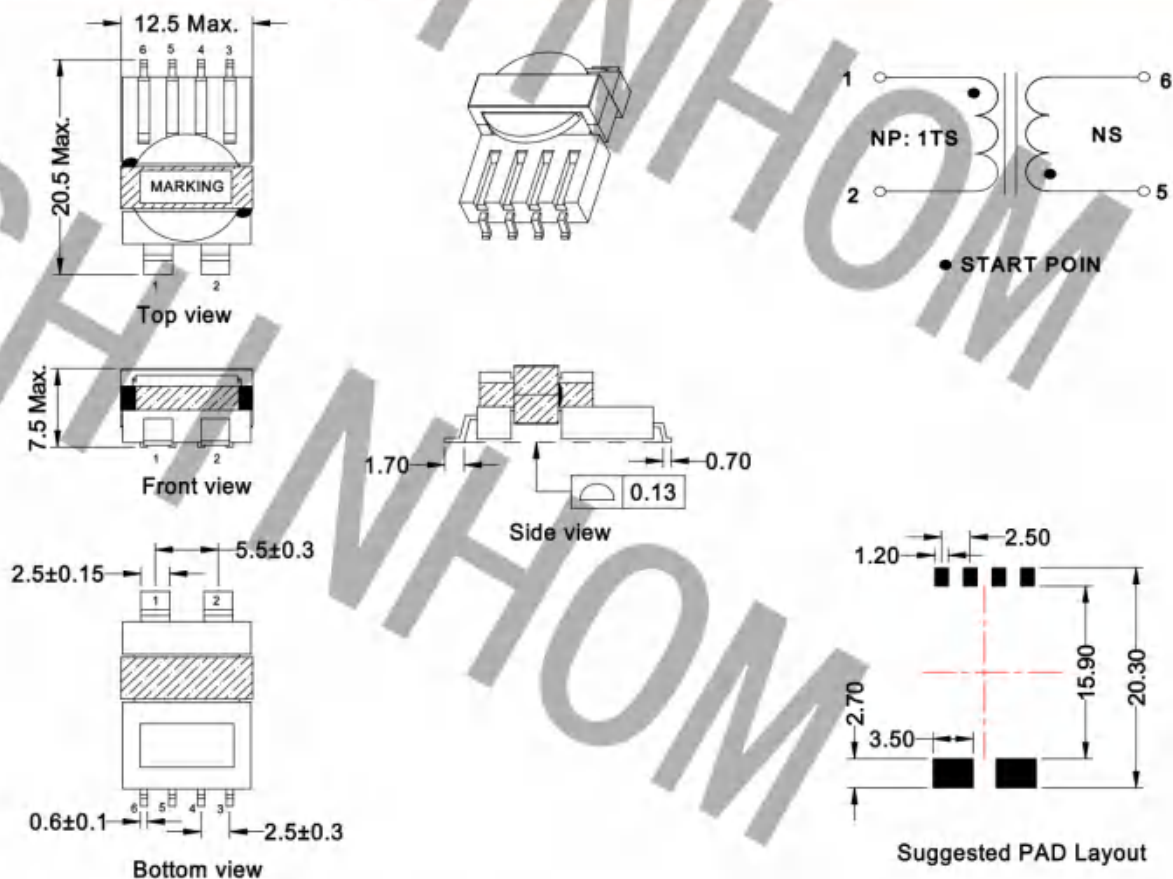
- Very low DC resistance.
- Sensed current up to 50 Amps.
- Small SMD mount.
- Operating temperature range -40 °C to 125 °C.
- RoHS Compliant



ELECTRICAL CHARACTERISTICS:

Part Number	Secondary Inductance (mH)	Current Rating (A)	Turns Ratio	DCR (mΩ)		Hipot (V _{DC})
				Max	Max	
	Min			Primary	Secondary	
	100KHz,0.1V	Max		1-2	5-6	
ACSTER11.5-030	0.3	50	1:30	0.56	240	3300
ACSTER11.5-050	1.1	50	1:50	0.56	600	3300
ACSTER11.5-100	4.5	50	1:100	0.56	2600	3300
ACSTER11.5-125	7.0	50	1:125	0.56	4200	3300
ACSTER11.5-150	10.0	50	1:150	0.56	6000	3300
ACSTER11.5-200	17.5	50	1:200	0.56	12000	3300

PHYSICAL CHARACTERISTICS



Note: All specifications subject to change without notice.

The SCTK08-C series are clamp-on current transformers. The CT can be mounted to existing panels, such as control centers or load centers, to measure or monitor wattage. These CTs can be mounted without removing existing cables for easier installation.



Electrical Specifications

MODEL	INPUT CURRENT	AVAILABLE OUTPUT
SCTK0801-C	1 A	CURRENT OUTPUTS @ 2mA, 2.5mA, 4mA, 5mA, 10mA VOLTAGE OUTPUTS @ 0.25V, 0.33V, 0.5V
SCTK0802-C	2 A	
SCTK0803-C	3 A	
SCTK0805-C	5 A	
SCTK0810-C	10 A	

APPLICATIONS

- Energy and sub-metering products
- Electrical load monitoring
- Network equipment
- Instruments and sensors
- Control systems
- Go GREEN initiatives

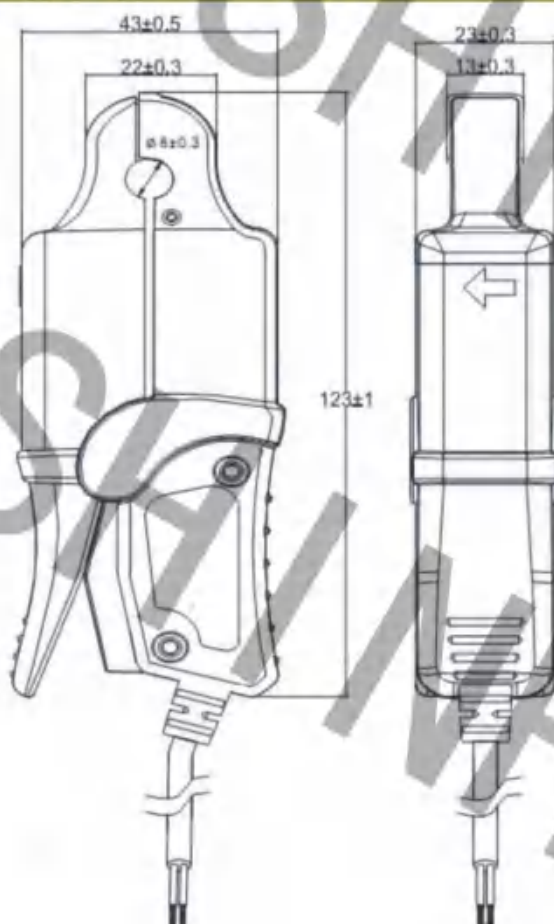
FEATURES

- 0.315" window opening (ID)
- Custom design Turns-Ratio available
- Rigid housing case with UL 94V-0 durable plastic
- 6ft black/white PVC wire leads—26~20AWG
- Approximate weight 250g

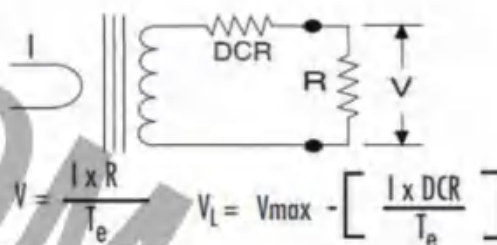
SPECIFICATIONS

- Standard Input Current 0.01-10A
- Frequency 50Hz — 400Hz
- Standard accuracy 0.2, 0.5
- Insulation Voltage 2500 Vac/1min
- Operating Temp. -40°C to +70°C
- Storage Temp. -45°C to +85 °C
- ANSI C57.13 and C12.20 Standards

Mechanical Dimensions in mm



Connection Diagram



CAUTION

Before installation, safety precautions must be followed by licensed professional. Never energize primary unless short circuited terminals or burden connected to secondary.

SCTK660A series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

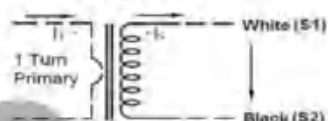
◆ Features

- The structure of the self-locking, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.

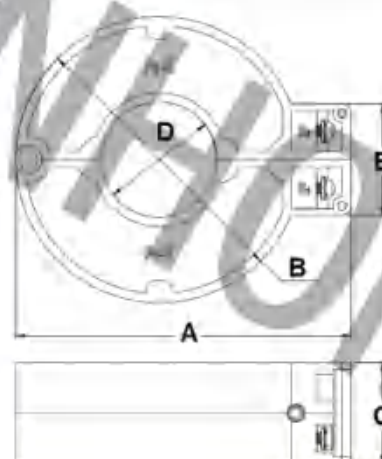
◆ Circuit connection diagram



◆ Designation



Rated Input/Output
ID dimension
Product model
Split core type
Current Transformer
Company Name in short



◆ Technique Index

Electrical Parameter	
Frequency	50-2.5KHz
Rated Input	0.5A-630A
Measuring range	10%In-130%In
Rated Output	0.333V(AC) or 0-5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 30\text{min}$
Dielectric strength	5.0KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	ABS/UL94-V0
Bobbin	PBT
Core	Permalloy
Internal structure	Epoxy
Construction	Tie
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	Terminal or UL1015 22AWG Wire 1.5m

◆ Type Selection

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm)				
				A	B	C	D	E
SCTK660A-010	0.5-100A (1, 5, 10, 30, 50, 100)	0-50mA 0.333V	0.2, 0.5, 1.0	50.0	40.0	22.5	10.0	24.0
SCTK660A-016	1-250A (10, 50, 75, 100, 200, 250)	0-100mA/1A 0.333V	0.2, 0.5, 1.0	61.0	50.0	22.5	16.0	24.0
SCTK660A-025	5-400A (10, 50, 100, 200, 250, 400)	0-200mA/1A/5A 0.333V	0.2, 0.5, 1.0	74.0	62.0	22.5	25.0	24.0
SCTK660A-032	5-630A (10, 50, 100, 200, 250, 630)	0-200mA/1A/5A 0.333V	0.2, 0.5, 1.0	81.5	70.0	22.5	32.0	24.0

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Split Core Current Transformers

SCTK660C Series



SCTK660C series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

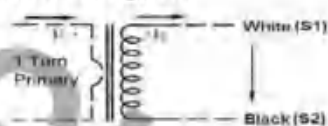
◆ Features

- The structure of the self-locking, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

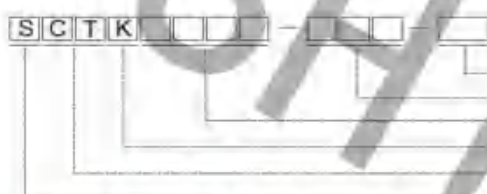
◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.

◆ Circuit connection diagram



◆ Designation



Rated Input/Output
ID dimension
Product model
Split core type
Current Transformer
Company Name in short

◆ Technique index

Electrical Parameter	
Frequency	50-2.5KHz
Rated Input	0.5A-1000A
Measuring range	10%In-130%In
Rated Output	0.333V(AC) or 0-5A
Ratio	±0.2
Phase angle	±10min
Dielectric strength	5.0KV/1mA/1min
Insulation Resistance	DC500V/100M ¹ min

Mechanical Parameter	
Case	PC/UL94-V0
Bobbin	PBT
Core	Permalloy
Internal structure	Epoxy
Construction	Tie
Operating Temp	25 75
Operating Humidity	85%
Output Connection	Terminal or UL1015 22AWG Wire 1.5m

◆ Type Selection

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm)			
				A	B	C	D
SCTK660C-010	0.5-100A	0.333V/0-50mA	0.2 0.5 1.0	57.0	50.0	22.0	10.0
SCTK660C-019	1-250A	0.333V/0-100mA/1A	0.2 0.5 1.0	66.0	59.0	22.0	19.0
SCTK660C-025	5-400A	0.333V/0-200mA/1A/5A	0.2 0.5 1.0	73.0	65.0	22.0	25.0
SCTK660C-032	5-630A	0.333V/0-200mA/1A/5A	0.2 0.5 1.0	82.0	74.0	22.0	32.0
SCTK660C-045	5-1000A	0.333V/0-500mA/1A/5A	0.2 0.5 1.0	95.0	86.0	22.0	45.0

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SCTK662 series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

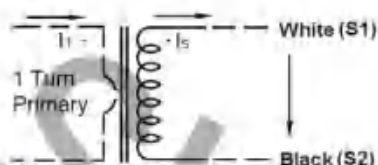
◆ Features

- Epoxy Potting, Double-screw fastening, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-400Hz
Rated Input	5A-3000A
Measuring range	5%In-130%In
Rated Output	0-10V(AC) or 0-5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	2.5KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC /UL94-V0
Bobbin	PBT
Core	Silicon steel
Internal structure	Epoxy
Construction	Tie
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	UL1015 22AWG Wire(twisted wire) 2.5m

◆ Type Selection (Output: mA/V)

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm/inch)					
				Ø	A	B	C	D	E
SCTK662A-025	5-400A (5, 100, 250, 400A)	0-200mA 0-10V	0.2, 0.5, 1.0	25	98	70	22	16	30
				(1.00)	(3.86)	(2.76)	(0.87)	(0.63)	(1.18)
SCTK662B-045	50-1000A (50, 250, 400, 1000A)	0-500mA 0-10V	0.2, 0.5, 1.0	45	128	98	26	16	32
				(1.77)	(5.04)	(3.86)	(1.02)	(0.63)	(1.26)
SCTK662C-065	100-1500A (100, 800, 1000, 1500A)	0-500mA 0-10V	0.2, 0.5, 1.0	65	148	118	26	16	34
				(2.56)	(5.83)	(4.65)	(1.02)	(0.63)	(1.34)
SCTK662D-080	500-2000A (500, 1000, 1500, 2000A)	0-500mA 0-10V	0.2, 0.5, 1.0	80	164	132	28	16	36
				(3.15)	(6.46)	(5.20)	(1.10)	(0.63)	(1.42)
SCTK662E-100	800-3000A (800, 1000, 2500, 3000A)	0-600mA 0-10V	0.2, 0.5, 1.0	100	194	162	30	16	38
				(3.94)	(7.64)	(6.38)	(1.18)	(0.63)	(1.50)

SCTK663 series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

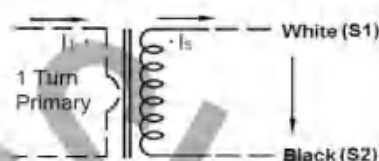
◆ Features

- Epoxy Potting, Double-screw fastening, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-400Hz
Rated Input	5A-1000A
Measuring range	5%In-130%In
Rated Output	0-10V(AC) or 0-5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	2.5KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC /UL94-V0
Bobbin	PBT
Core	Silicon steel
Internal structure	Epoxy
Construction	Tie
Operating Temp	-25℃~75℃
Operating Humidity	$\leq 85\%$
Output Connection	UL1015 22AWG Wire(twinsted wire) 2.5m

◆ Type Selection (Output: mA/V)

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm/inch)					
				Ø	A	B	C	D	E
SCTK663A-025	5-400A (5、100、250、400A)	0-200mA 0-10V	0.2、0.5、1.0	25	118	90	42	16	32
				(1.00)	(4.65)	(3.54)	(1.65)	(0.63)	(1.26)
SCTK663B-045	50-1000A (50、250、400、1000A)	0-500mA 0-10V	0.2、0.5、1.0	45	145	113	42	16	32
				(1.77)	(5.71)	(4.45)	(1.65)	(0.63)	(1.26)



SCTK667B series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

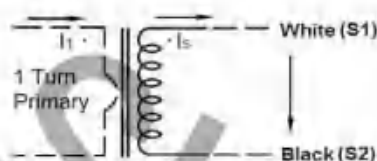
◆ Features

- Epoxy Potting, Double-screw fastening, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-400Hz
Rated Input	5A-3000A
Measuring range	5%In-130%In
Rated Output	0-10V(AC) or 0-5A
Ratio	$\leq \pm 0.1\%$
Phase angle	$\leq \pm 5\text{min}$
Dielectric strength	3.0KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	ABS /UL94-V0
Bobbin	PBT
Core	Silicon steel
Internal structure	Epoxy
Construction	Tie
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	Terminal

◆ Type Selection (Output: A/V/mA)

P/N	Rated Input (A)	Output (A/V/mA)	Accuracy	Dimensions(mm)				
				Ø	A	B	C	D
SCTK667B-025	0-400A	1A/5A 0-10V 0-500mA	0.1 0.2 0.5 1.0	25	100	70	33	32
SCTK667B-032	0-630A			32	110	83	33	32
SCTK667B-055	0-1500A			55	134	106	33	32
SCTK667B-080	0-2000A			80	168	139	33	32
SCTK667B-100	0-3000A			102	198	168	33	32

Split Core Current Transformers

SCTK667C Series



SCTK667C series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

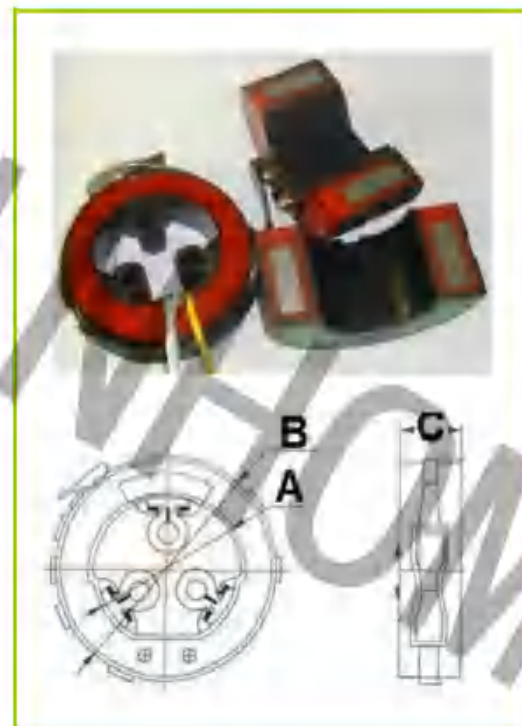
Features

- β Epoxy Potting, Double-screw fastening, safe, easy to install, portable
- β Wide inner window, allowing clamping of big cables or bus-bars
- β Wide range of sizes to accommodate all the existing installations

Applications

- β Current measurement, monitoring and protection for electrical wiring and equipment.
- β Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- β Current, power and energy monitoring device.
- β Relay protection device.

Circuit connection diagram



Technique Index

Electrical Parameter	
Frequency	50-500Hz
Rated Input	5A-3000A
Measuring range	5%In-130%In
Rated Output	0-10V(AC) or 0-5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	5.0KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC /UL94-V0
Bobbin	PBT
Core	Silicon steel
Internal structure	Epoxy
Construction	Tie
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	UL1015 22AWG Wire(twinsted wire) 1.0m

Type Selection (Output: mA/V)

P/N	Rated Input (A)	Output (A)	Accuracy	Dimensions(mm)		
				A	B	C
SCTK667C-6432	0-1200A	1A/5A	0.2, 0.5, 1.0	64	104	32
SCTK667C-5052	0-1000A	1A/5A		50	110	52
SCTK667C-50105	0-1000A	1A/5A		50	110	105
SCTK667C-9632	0-2000A	1A/5A		96	130	32
SCTK667C-5550	0-1000A	1A/5A		55	86	50

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SCTK667D Series

SCTK667D series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

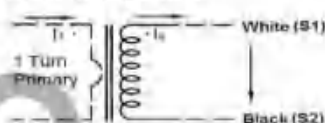
Features

- Outdoor use, resisting wind, rain and UV fading, IP65, Acquisition voltage signal in the field
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.

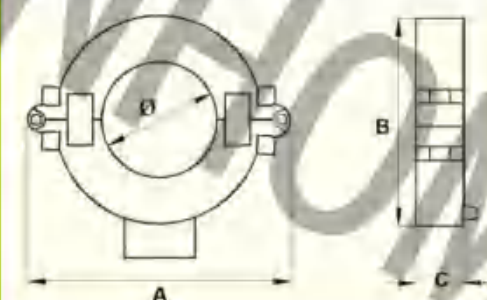
Circuit connection diagram



Designation

S C T K [] [] [] [] - [] [] [] [] - [] [] [] []

Rated Input/Output
ID dimension
Product model
Split core type
Current Transformer
Company Name in short



Technique Index

Electrical Parameter	
Frequency	50-60Hz
Rated Input	50A-2000A
Measuring range	1%In-130%In
Rated Output	1A/5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	3.0KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC+ABS/UL94-V0
Bobbin	PBT
Core	Permalloy
Internal structure	Epoxy
Construction	Tie
Operating Temp	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Operating Humidity	$\leq 96\%$
Output Connection	Terminal or UL14AWG Wire 1.5m

Type Selection

P/N	Rated Input (A)	Output (A)	Accuracy	Dimensions(mm)			
				Ø	A	B	C
SCTK667D-025	50-400A	1A/5A	0.5, 1.0, 3.0	25	173	105	56
SCTK667D-032	100-630A	1A/5A	0.5, 1.0, 3.0	32	206	112	56
SCTK667D-045	100-1000A	1A/5A	0.2, 0.5, 1.0	45	193	125	56
SCTK667D-055	100-1200A	1A/5A	0.2, 0.5, 1.0	55	180	135	56
SCTK667D-065	100-1500A	1A/5A	0.2, 0.5, 1.0	65	203	145	56
SCTK667D-080	200-2000A	1A/5A	0.2, 0.5, 1.0	80	228	160	56
SCTK667D-100	500-3000A	1A/5A	0.2, 0.5, 1.0	100	248	180	56

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SCTK671 series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

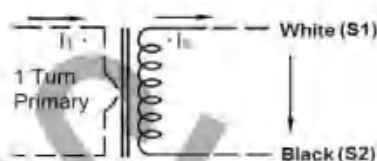
◆ Features

- Epoxy Potting, Double-screw fastening, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-400Hz
Rated Input	5A-3000A
Measuring range	5%In-130%In
Rated Output	0-10V(AC) or 0-5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	2.5KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC /UL94-V0
Bobbin	PBT
Core	Silicon steel
Internal structure	Epoxy
Construction	Tie
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	UL1015 22AWG Wire(twinsted wire) 2.5m

◆ Type Selection (Output: mA/V)

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm/inch)											
				Ø	A	B	C	D	E	F	G	H	Ø1	Ø2	
SCTK671A-025	5-400A (5、100、400A)	0-200mA 0-10V	0.2、0.5、1.0	25	80	75	22	56	73	53	21	17	5	5	
SCTK671B-045	50-1000A (50、400、1000A)	0-500mA 0-10V		45	105	107	25	71	100	74	24	13	5	5	
SCTK671C-065	100-1500A (100、1000、1500A)	0-500mA 0-10V		65	125	127	25	91	120	94	27	17	5	5	
SCTK671D-080	500-2000A (500、1500、2000A)	0-500mA 0-10V		80	144	144	28	97	134	104	27	17	5	5	
SCTK671E-100	800-3000A (800、2500、3000A)	0-600mA 0-10V		100	174	174	30	125	162	120	27	17	5	5	

SCTK673 series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

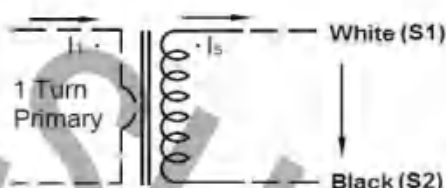
◆ Features

- Epoxy Potting, Double-screw fastening, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-400Hz
Rated Input	5A-1000A
Measuring range	5%In-130%In
Rated Output	0-10V(AC) or 0-5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	2.5KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC /UL94-V0
Bobbin	PBT
Core	Silicon steel
Internal structure	Epoxy
Construction	Tie
Operating Temp	-25℃ ~ 75℃
Operating Humidity	$\leq 85\%$
Output Connection	UL1015 22AWG Wire(twinsted wire) 2.5m

◆ Type Selection (Output: mA/V)

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm/inch)									
				Ø	A	B	C	D	E	F	G	Ø1	Ø2
SCTK673A-025	5-400A (5, 100, 250, 400A)	0-200mA 0-10V	0.2, 0.5, 1.0	25	100	100	42	60	87	72	22	16	5
				(1.0)	(3.9)	(3.9)	(1.7)	(2.4)	(3.4)	(2.8)	(0.9)	(0.6)	(0.2)
SCTK673B-045	50-1000A (50, 250, 400, 1000A)	0-500mA 0-10V	0.2, 0.5, 1.0	45	123	123	42	80	109	94	23	16	5
				(1.8)	(4.8)	(4.8)	(1.7)	(3.1)	(4.3)	(3.7)	(0.9)	(0.6)	(0.2)



SCTK681B series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

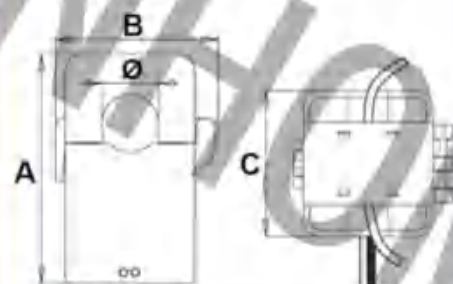
◆ Features

- The structure of the self-locking, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-2KHz
Rated Input	5A-630A
Measuring range	10%In-130%In
Rated Output	0.333V(AC) or 0-500mA
Ratio	$\pm 1.0\%$
Phase angle	$\leq \pm 60\text{min}$
Dielectric strength	2.5KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PA /UL94-V0
Bobbin	PBT
Core	Permalloy
Internal structure	Epoxy
Construction	Tie
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	UL1015 20AWG Wire(twisted wire) 2.5m

◆ Type Selection (Output: mA/V)

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm/inch)			
				Ø	A	B	C
SCTK681B-010	5-75A (5、10、20、50、75)	0-50mA	0.5、1.0、3.0	10.0	41.5	30.0	26.5
		0.333V		(0.39)	(1.63)	(1.18)	(1.04)
SCTK681B-016	5-150A (5、10、50、100、150)	0-100mA	0.5、1.0、3.0	16.0	53.0	36.0	30.5
		0.333V		(0.63)	(2.09)	(1.42)	(1.20)
SCTK681B-024	10-250A (10、50、100、200、250)	0-200mA	0.5、1.0、3.0	24.0	70.0	51.5	39.0
		0.333V		(0.95)	(2.76)	(2.03)	(1.50)
SCTK681B-035	10-630A (20、100、250、400、600)	0-500mA	0.5、1.0、3.0	35.0	84.0	65.0	41.0
		0.333V		(1.38)	(3.31)	(2.56)	(1.61)

Product Specification

Date:2015-8-7

Product Name	Current transformer	Model	SCTK681C-013
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Characteristics: Opening size 13mm*13mm, 1m leading wire, standard 3.5 three-core plug output voltage output type.

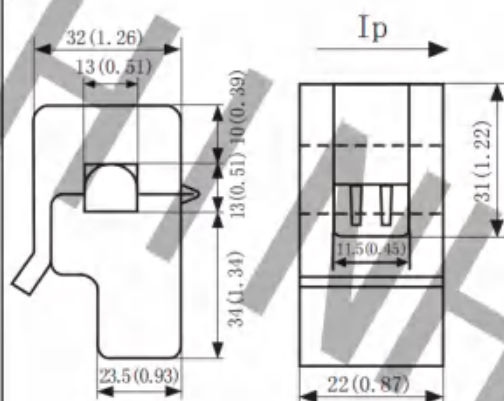
Purpose Used for current measurement, monitor and protection for AC motor, lighting equipment, air compressor etc.

Technical Data

I_{PN}	Rated input	0-60A
I_{PM}	Max. detection input	
I_{OUT}	Rated output	0-1V
X	Accuracy	$\pm 1\%$
ϵ_L	Linearity	$\leq 0.2\%$
N	Turns ratio	1:1800
Φ	Phase shift	
R_L	Max. Sampling resistance	
V_{PN}	Work voltage	660V
f	Work frequency	50-1KHz
T_A	Operating temperature	$-25..+70^{\circ}\text{C}$
T_S	Storage temperature	$-40..+85^{\circ}\text{C}$
Vd	Dielectric strength, 50 Hz, 1 min	3KV

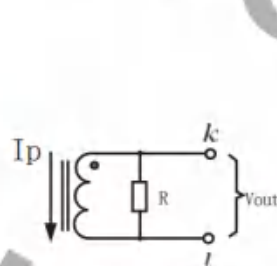
Fire resistance	UL94-V0
Material of core	Ferrite
Mounting type	Suspension
Weight	55g

Dimension (mm(in). 1 mm= 0.0394 inch)

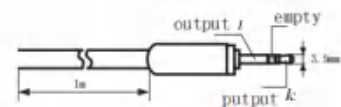


Front view

Side view



voltage output type



can provide other wiring way

Standard three-core plugs schematic diagram



SCTK691/2 series retro-fit (Clamp-on) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

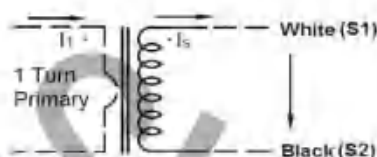
◆ Features

- Clamp on design, Fastening, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-400Hz
Rated Input	5A-3000A
Measuring range	5%In-130%In
Rated Output	0-10V(AC) or 0-5A
Ratio	$\leq \pm 0.1\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	3.0KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	ABS /UL94-V0
Bobbin	PBT
Core	Silicon steel / Permalloy
Internal structure	Screw
Construction	Screw
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	UL1015 22AWG Wire(twinsted wire) 2.5m

◆ Type Selection

P/N	Rated Input	Ratio	Accuracy	Dimensions(mm) (ID-L-W-H)
SCTK691A-008	0-20A	1000: 1 2000: 1 2500: 1 4000: 1	0.1, 0.2, 0.5	8.0-135.0-42.0-20.0
SCTK691A-013	0-100A		0.1, 0.2, 0.5	13.0-137.0-42.0-25.0
SCTK691A-020	5-250A		0.1, 0.2, 0.5	20.0-137.0-46.0-25.0
SCTK691A-050	100-1200A		0.1, 0.2, 0.5	50.0-215.0-104.0-27.0
SCTK692A-085	100-1500A		0.1, 0.2, 0.5	82.0*52.0-272.0-116.0-37.0
SCTK692A-125	100-3000A		0.1, 0.2, 0.5	125.0*52.0-327.0-116.0-37.0

SCTK691C series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

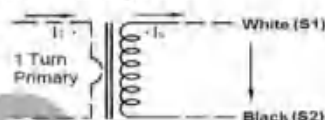
Features

- The structure of the self-locking, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

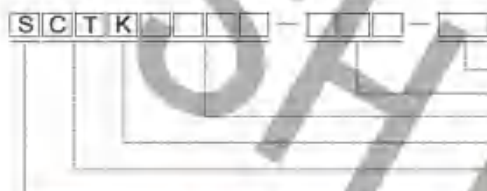
Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.

Circuit connection diagram

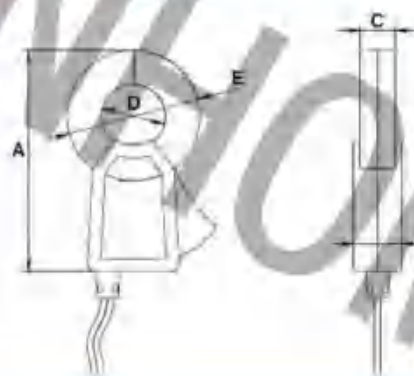


Designation



Rated Input/Output
ID dimension
Product model
Split core type
Current Transformer
Company Name in short

Technique Index



Electrical Parameter	
Frequency	50-2.5KHz
Rated Input	0.5A-630A
Measuring range	10%In-130%In
Rated Output	0.333V(AC) or 0-5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	5.0KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC/UL94-V0
Bobbin	PBT
Core	Permalloy
Internal structure	Epoxy
Construction	Tie
Operating Temp	-25℃~+75℃
Operating Humidity	$\leq 85\%$
Output Connection	Terminal or UL1015 22AWG Wire 1.5m

Type Selection

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm)				
				A	B	C	D	E
SCTK691C-010	0.5-100A	0.333V/0-50mA	0.2, 0.5, 1.0	63.0	25.0	20.0	10.0	37.0
SCTK691C-016	1-250A	0.333V/0-100mA	0.2, 0.5, 1.0	71.0	20.0	15.0	15.0	43.0
SCTK691C-025	5-400A	0.333V/0-200mA	0.2, 0.5, 1.0	87.0	20.0	15.0	25.0	52.0
SCTK691C-036	5-630A	0.333V/0-200mA/1A	0.2, 0.5, 1.0	117.0	27.0	22.0	35.0	71.0
SCTK691C-050	5-1000A	0.333V/0-500mA/1A/5A	0.2, 0.5, 1.0	135.0	27.0	22.0	50.0	100.0

SCTK731 series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

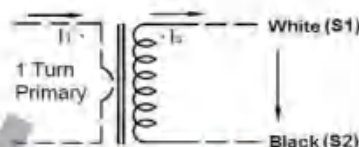
◆ Features

- Double-screw fastening, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-400Hz
Rated Input	5A-5000A
Measuring range	5%In-130%In
Rated Output	0-5A
Ratio	$\leq \pm 0.5\%$
Phase angle	$\leq \pm 30\text{min}$
Dielectric strength	2.5KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC /UL94-V0
Bobbin	PC
Core	Silicon steel
Internal structure	Epoxy
Construction	Screw
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	Terminal

◆ Type Selection (Output: 1A/5A)

P/N	Rated Input (A)	Output (A)	Accuracy	Dimensions(mm)								
				A	B	C	D	E	F	G	H	I
SCTK731A(23)	100-400A	1A/5A	0.5, 1.0, 3.0	20	30	50	88	104	34	41	40	31
SCTK731B(58)	250-1000A	1A/5A	0.5, 1.0, 3.0	50	80	78	114	145	32	32	33	33
SCTK731C(88)	250-1000A	1A/5A	0.5, 1.0, 3.0	80	80	108	144	145	32	32	33	33
SCTK731D(812)	500-1500A	1A/5A	0.5, 1.0, 3.0	80	120	108	144	185	32	32	33	33
SCTK731E(814)	600-5000A	1A/5A	0.5, 1.0, 3.0	80	140	122	176	228	47	47	53	38
SCTK731F(816)	800-5000A	1A/5A	0.5, 1.0, 3.0	80	160	120	176	246	48	48	53	38
SCTK731G(36)	100-3000A	1A/5A	0.5, 1.0, 3.0	30	60	88	132	131	49	36	55	43
SCTK731H(513)	100-4000A	1A/5A	0.5, 1.0, 3.0	55	130	80	125	195	35	30	53	35

SCTK732A series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

◆ Features

- The structure of the self-locking, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.

◆ Circuit connection diagram



◆ Designation



Rated Input/Output
ID dimension
Product model
Split core type
Current Transformer
Company Name in short

◆ Technique Index



Electrical Parameter	
Frequency	50-2.5KHz
Rated Input	0.5A-5000A
Measuring range	10%In-130%In
Rated Output	0.333V(AC) or 0-5A
Ratio	$\pm 0.2\%$
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	5.0KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC+ABS/UL94-V0
Bobbin	PC+ABS
Core	Silicon
Internal structure	Epoxy
Construction	Tie
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	Terminal

◆ Type Selection (Output: 1A/5A/0.333V)

P/N	Input (A)	Output (A/V)	Accuracy	Dimensions(mm)									
				A1	B1	A	B	C	D	E	F	G	H
SCTK732A-330	0-630A	1A/5A/0.333V	0.2, 0.5, 1.0	33	32	65	104	64	78	13	2	28	44
SCTK732A-430	0-800A	1A/5A/0.333V	0.2, 0.5, 1.0	43	32	75	104	64	78	13	2	28	44
SCTK732A-530	0-1250A	1A/5A/0.333V	0.2, 0.5, 1.0	53	32	85	104	64	78	13	2	28	44
SCTK732A-630	0-1600A	1A/5A/0.333V	0.2, 0.5, 1.0	63	32	95	104	64	78	13	2	28	44
SCTK732A-830	0-2000A	1A/5A/0.333V	0.2, 0.5, 1.0	83	32	115	104	64	78	13	2	28	44
SCTK732A-1030	0-2500A	1A/5A/0.333V	0.2, 0.5, 1.0	103	32	135	104	64	78	13	2	28	44
SCTK732A-1230	0-2500A	1A/5A/0.333V	0.2, 0.5, 1.0	123	32	155	104	64	78	13	2	28	44
SCTK732A-1330	0-2500A	1A/5A/0.333V	0.2, 0.5, 1.0	133	32	165	104	64	78	13	2	28	44
SCTK732A-1430	0-2500A	1A/5A/0.333V	0.2, 0.5, 1.0	143	32	175	104	64	78	13	2	28	44
SCTK732A-350	0-630A	1A/5A/0.333V	0.2, 0.5, 1.0	33	52	65	124	64	78	13	2	28	44
SCTK732A-450	0-800A	1A/5A/0.333V	0.2, 0.5, 1.0	43	52	75	124	64	78	13	2	28	44
SCTK732A-550	0-1250A	1A/5A/0.333V	0.2, 0.5, 1.0	53	52	85	124	64	78	13	2	28	44

SCTK732A-650	0-1600A	1A/5A/0.333V	0.2、0.5、1.0	63	52	95	124	64	78	13	2	28	44
SCTK732A-850	0-2000A	1A/5A/0.333V	0.2、0.5、1.0	83	52	115	124	64	78	13	2	28	44
SCTK732A-1050	0-2500A	1A/5A/0.333V	0.2、0.5、1.0	103	52	135	124	64	78	13	2	28	44
SCTK732A-1250	0-2500A	1A/5A/0.333V	0.2、0.5、1.0	123	52	155	124	64	78	13	2	28	44
SCTK732A-1350	0-2500A	1A/5A/0.333V	0.2、0.5、1.0	133	52	165	124	64	78	13	2	28	44

SCTK732A-650	0-1600A	1A/5A/0.333V	0.2、0.5、1.0	63	52	95	124	64	78	13	2	28	44
SCTK732A-850	0-2000A	1A/5A/0.333V	0.2、0.5、1.0	83	52	115	124	64	78	13	2	28	44
SCTK732A-1050	0-2500A	1A/5A/0.333V	0.2、0.5、1.0	103	52	135	124	64	78	13	2	28	44
SCTK732A-1250	0-2500A	1A/5A/0.333V	0.2、0.5、1.0	123	52	155	124	64	78	13	2	28	44
SCTK732A-1350	0-2500A	1A/5A/0.333V	0.2、0.5、1.0	133	52	165	124	64	78	13	2	28	44

SCTK751 series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

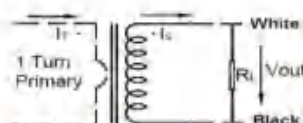
◆ Features

- Split core design, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter	
Frequency	50-60Hz
Rated Input	5A-5000A
Measuring range	10%In-130%In
Rated Output	0.333V(AC) or 0-500mA
Ratio	±1.0%
Phase angle	≤ ±90min
Dielectric strength	2.5KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC /UL94-V0
Bobbin	PBT
Core	Permalloy
Internal structure	Epoxy
Construction	Tie
Operating Temp	-25℃~+75℃
Operating Humidity	≤85%
Output Connection	UL1015 22AWG Wire(twisted wire) 2.0m

◆ Type Selection

P/N	Rated Input (A)	Output (mA/V)	Accuracy	Dimensions(mm/inch)				
				A	B	C	D	E
SCTK751A	5-200A (5, 10, 30, 50, 75, 100, 125, 150, 200)	0-13.3mA 0.333V	1.0	50.8 (2.00)	53.3 (2.09)	15.0 (0.59)	19.1 (0.75)	19.1 (0.75)
SCTK751B	10-400A (10, 50, 75, 150, 200, 250, 300, 400)	0-26.6mA 0.333V	1.0	59.6 (2.35)	62.7 (2.47)	21.0 (0.83)	19.1 (0.75)	19.1 (0.75)
SCTK751C	50-630A (50, 100, 125, 200, 250, 400, 600, 630)	0-66.6mA 0.333V	1.0	82.5 (3.25)	85.1 (3.35)	25.6 (1.01)	31.8 (1.25)	31.8 (1.25)
SCTK751D	100-2000A (100, 250, 400, 630, 800A, 1000, 2000)	0-200mA 0.333V	1.0	121.0 (4.76)	127.0 (5.00)	30.4 (1.19)	50.8 (2.00)	50.8 (2.00)
SCTK751E	200-3000A (200, 250, 400, 630, 1500, 2500, 3000)	0-300mA 0.333V	1.0	118.0 (4.65)	133.0 (5.24)	24.0 (0.94)	68.0 (2.68)	80.0 (3.15)
SCTK751F	400-5000A (400, 800, 1000, 1500, 2000, 3000, 5000)	0-500mA 0.333V	1.0	146.0 (5.75)	190.5 (7.50)	35.6 (1.40)	76.2 (3.00)	127.0 (5.00)

Split Core Current Transformers

SCTK831 Series



SCTK831 series retro-fit (split-core) current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

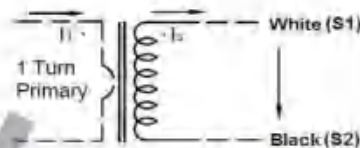
◆ Features

- Double-screw fastening, safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

◆ Applications

- Current measurement, monitoring and protection for electrical wiring and equipment.
- Current and power measurement for electric motors, lighting, air compressor, heating and ventilation system, air-condition equipment and automation – control system.
- Current, power and energy monitoring device.
- Relay protection device.

◆ Circuit connection diagram



◆ Technique Index

Electrical Parameter

Frequency	50-60Hz
Rated Input	5A-5000A
Measuring range	5%In-130%In
Rated Output	0-5A
Ratio	$\leq \pm 0.5\%$
Phase angle	$\leq \pm 30\text{min}$
Dielectric strength	3.0KV/1mA/1min
Insulation Resistance	DC500V/100M Ω min

Mechanical Parameter

Case	PC /UL94-V0
Bobbin	PC
Core	Silicon steel
Internal structure	Epoxy
Construction	Screw
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	Terminal

◆ Type Selection (Output: 1A/5A)

P/N	Rated Input (A)	Output (A)	Accuracy	Dimensions(mm)				
				a	e	W	H	D
SCTK831A(23)	20-400A	1A/5A	0.5, 1.0, 2.0, 3.0	20	30	30	30	31
SCTK831B(46)	250-1500A	1A/5A	0.5, 1.0	40	60	114	140	36
SCTK831C(58)	250-1500A	1A/5A	0.5, 1.0	50	80	122	163	40
SCTK831D(88)	250-1500A	1A/5A	0.5, 1.0	80	80	144	162	36
SCTK831E(510)	1000-4000A	1A/5A	0.2, 0.5, 1.0	50	100	141	190	36
SCTK831F(612)	400-5000A	1A/5A	0.2, 0.5, 1.0	60	125	164	195	51
SCTK831G(614)	1000-5000A	1A/5A	0.2, 0.5, 1.0	60	140	162	230	36
SCTK831H(812)	500-1500A	1A/5A	0.2, 0.5, 1.0	80	120	151	204	36
SCTK831I(816)	1000-5000A	1A/5A	0.2, 0.5, 1.0	80	160	184	250	36
SCTK831K(820)	1000-5000A	1A/5A	0.2, 0.5, 1.0	80	200	183	300	52

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SCTK752C Series

The SCTK752C series switchable transformer is an improved version of traditional transformers. Made into a free opening and closing type, it can be quickly installed and disassembled without power outage or interruption, and is easy to operate. This series of products has a wide measurement range, with a rated primary current range of 5~5000A, a rated secondary current range of 0~5A, and a current ratio range of 50:1~5000:1. The orderly manufacturing process ensures its accuracy level, reliability, and other technical requirements.

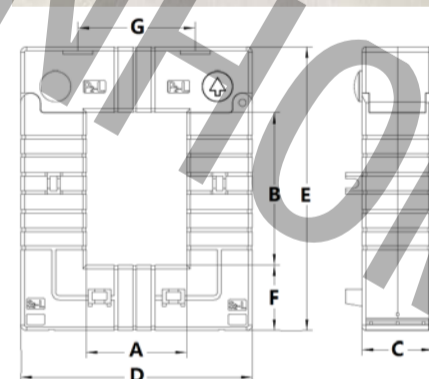
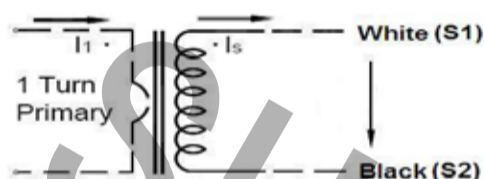
◆ Features

- Double screw tight structure with good consistency
- Using high magnetic conductivity silicon steel, with good linearity and high sensitivity
- Internal epoxy resin casting, good stability, light weight, easy installation

◆ Applications

- Suitable for devices such as power measurement, power quality analysis, active filters
- Suitable for power demand side management of lighting equipment, motors, power devices, and other equipment

◆ Circuit connection diagram



◆ Designation

Electrical Parameter	
Frequency	50-400Hz
Rated Input	5A-5000A
Measuring range	5%In-130%In
Rated Output	0-5A
Ratio	$\leq \pm 0.2\%$
Phase angle	$\leq \pm 10'$
Dielectric strength	2.5KV/1mA/1min
Insulation Resistance	DC500V/100MQ min

Mechanical Parameter	
Case	PC/UL94-V0
Bobbin	PBT
Core	Silicon steel
Internal structure	Ultrasonic welding
Construction	Screw fixation
Operating Temp	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Operating Humidity	$\leq 85\%$
Output Connection	Terminal

◆ Type Selection(Output 1A/5A)

P/N	Rated Input (A)	Output (A)	Accuracy	Dimensions(mm)						
				A	B	C	D	E	F	G
SCTK752C(23)	100-400A	1A/5A	0.2, 0.5	24.0	32.0	38.0	95.0	103.0	35.5	33.0
SCTK752C(38)	250-1500A	1A/5A	0.2, 0.5	34.0	82.0	38.0	105.0	153.0	35.5	43.0
SCTK752C(310)	500-2000A	1A/5A	0.2, 0.5	34.0	102.0	38.0	105.0	173.0	35.5	43.0
SCTK752C(312)	800-2500A	1A/5A	0.2, 0.5	34.0	122.0	38.0	105.0	193.0	35.5	43.0
SCTK752C(313)	1000-4000A	1A/5A	0.2, 0.5	34.0	132.0	38.0	105.0	203.0	35.5	43.0

SCTK752C(46)	250-1200A	1A/5A	0.2、0.5	44.0	62.0	38.0	115.0	133.0	35.5	53.0
SCTK752C(58)	250-1500A	1A/5A	0.2、0.5	54.0	82.0	38.0	125.0	153.0	35.5	63.0
SCTK752C(510)	500-2000A	1A/5A	0.2、0.5	54.0	102.0	38.0	125.0	173.0	35.5	63.0
SCTK752C(512)	800-2500A	1A/5A	0.2、0.5	54.0	122.0	38.0	125.0	193.0	35.5	63.0
SCTK752C(513)	1000-4000A	1A/5A	0.2、0.5	54.0	132.0	38.0	125.0	203.0	35.5	63.0
SCTK752C(88)	250-1500A	1A/5A	0.2、0.5	84.0	82.0	38.0	155.0	153.0	35.5	93.0
SCTK752C(812)	800-2500A	1A/5A	0.2、0.5	84.0	122.0	38.0	155.0	193.0	35.5	93.0
SCTK752C(814)	1000-5000A	1A/5A	0.2、0.5	84.0	142.0	38.0	155.0	213.0	35.5	93.0
SCTK752C(816)	1500-5000A	1A/5A	0.2、0.5	84.0	162.0	38.0	155.0	233.0	35.5	93.0
SCTK752C(820)	2000-6000A	1A/5A	0.2、0.5	84.0	202.0	38.0	155.0	273.0	35.5	93.0
SCTK752C(1026)	2000-6000A	1A/5A	0.2、0.5	104.0	262.0	38.0	175.0	333.0	35.5	113

Low Voltage Current Transformers

CP Series

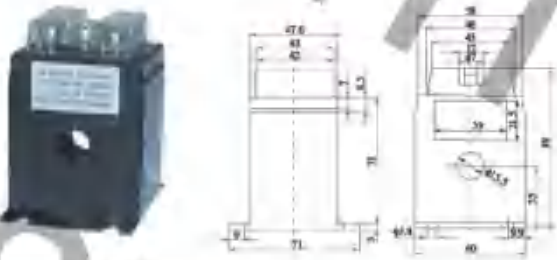
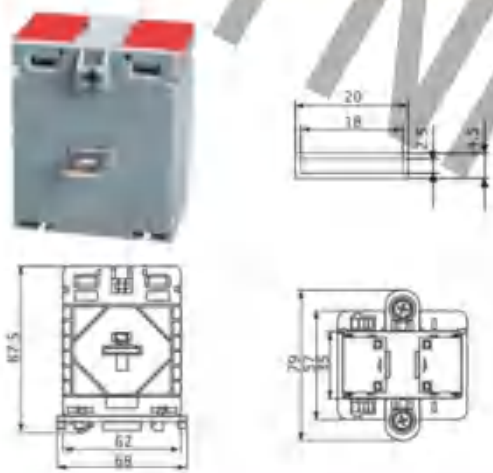


General:

CP series current transformer is compact, smaller than other models with the current ratio of the transformer is small, clamshell-style terminal cover is well protected by the second terminal. With related accessories you can use Din rail mounting, a current from 5A to 300A

Electrical Parameter	
Frequency	50/60Hz
Rated Input	1A-5000A
Measuring range	5%In-130%In
Rated Output	1A, 5A
Rated Voltage	0.72KV(AC)
Dielectric strength	3.0KV/1mA/1min
Insulation Resistance	DC500V/100MΩ min

Mechanical Parameter	
Case	PC /UL94-V0
Bobbin	PBT
Core	Silicon steel
Construction	Screw
Operating Temp	-25℃~+75℃
Operating Humidity	≤85%
Output Connection	Terminal

CP-4 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP-4	5/5	5	10
	CP-4	10/5	5	10
	CP-4	15/5	5	10
	CP-4	20/5	5	10
	CP-4	30/5	5	10
	CP-4	40/5	5	10
	CP-4	50/5	5	10
	CP-4	80/5	5	10
	CP-4	100/5	5	10
	CP-4	5-100/1	5	10
CP62/WS & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP62/WS	5/5	1.5	2.5
	CP62/WS	10/5	1.5	2.5
	CP62/WS	15/5	1.5	2.5
	CP62/WS	20/5	1.5	2.5
	CP62/WS	25/5	1.5	2.5
	CP62/WS	30/5	2.5	5
	CP62/WS	40/5	2.5	5
	CP62/WS	50/5	2.5	5
	CP62/WS	60/5	2.5	5
	CP62/WS	75/5	2.5	5
	CP62/WS	100/5	5	10
	CP62/WS	150/5	5	10
	CP62/WS	5-150/1	5	10

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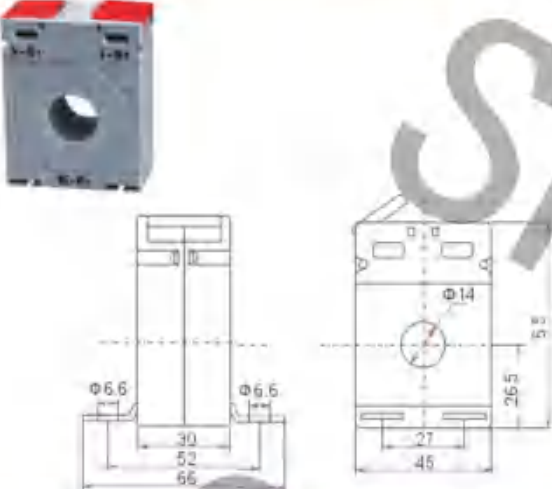
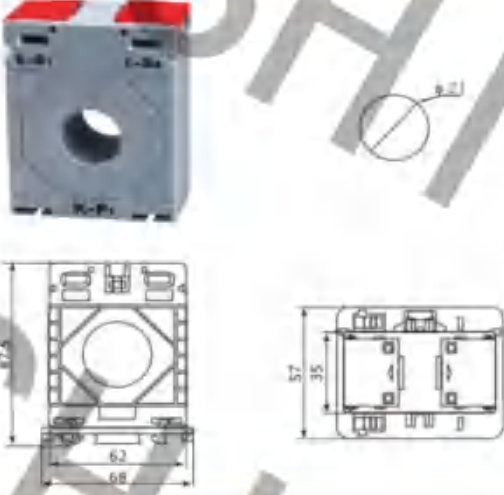
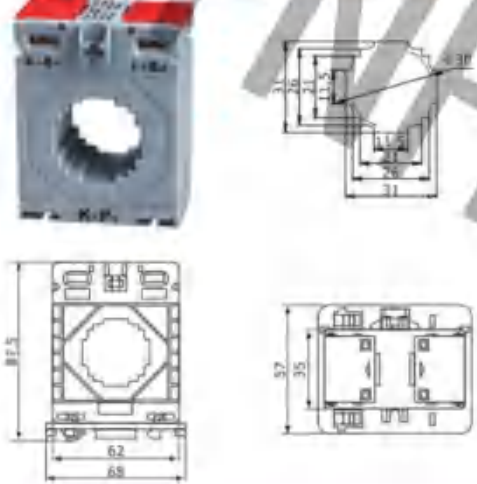
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Low Voltage Current Transformers

CP Series



CP45/14 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP45/14	50/5	1.5	2.5
	CP45/14	60/5	1.5	2.5
	CP45/14	75/5	1.5	2.5
	CP45/14	80/5	1.5	2.5
	CP45/14	100/5	1.5	2.5
	CP45/14	30/1	1.5	2.5
	CP45/14	40/1	1.5	2.5
	CP45/14	50/1	1.5	2.5
	CP45/14	60/1	1.5	2.5
	CP45/14	75/1	1.5	5
	CP45/14	100/1	2.5	5
	CP45/14	150/1	2.5	5
CP62/20 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP62/20	30/5	---	1.5
	CP62/20	40/5	1.5	2.5
	CP62/20	50/5	1.5	2.5
	CP62/20	60/5	1.5	2.5
	CP62/20	75/5	1.5	2.5
	CP62/20	80/5	2.5	5
	CP62/20	100/5	2.5	5
	CP62/20	150/5	5	10
	CP62/20	200/5	5	10
	CP62/20	75/1	1.5	2.5
	CP62/20	100/1	2.5	5
	CP62/20	200/1	5	10
CP62/30 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP62/30	30/5	---	2.5(4T)
	CP62/30	40/5	---	2.5(3T)
	CP62/30	50/5	---	2.5(2T)
	CP62/30	60/5	---	2.5(2T)
	CP62/30	75/5	---	2.5
	CP62/30	100/5	1.5	2.5
	CP62/30	150/5	2.5	5
	CP62/30	200/5	3.75	5
	CP62/30	250/5	5	7.5
	CP62/30	400/5	5	10
	CP62/30	50/1	2.5	5
	CP62/30	400/1	5	10

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CP62/40 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP62/40	60/5	---	1.5(2T)
	CP62/40	75/5	---	1.5(2T)
	CP62/40	100/5	---	1.5
	CP62/40	150/5	---	2.5
	CP62/40	200/5	1.5	2.5
	CP62/40	250/5	2.5	3.75
	CP62/40	400/5	2.5	5
	CP62/40	500/5	2.5	5
	CP62/40	600/5	5	7.5
	CP62/40	60/1	2.5	5
	CP62/40	250/1	2.5	5
	CP62/40	600/1	5	10
CP74/40 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP74/40	60/5	---	1.5
	CP74/40	75/5	1.5	2.5
	CP74/40	100/5	1.5	2.5
	CP74/40	150/5	1.5	2.5
	CP74/40	200/5	1.5	5
	CP74/40	250/5	2.5	5
	CP74/40	400/5	5	7.5
	CP74/40	500/5	5	10
	CP74/40	600/5	5	10
	CP74/40	60/1	2.5	5
	CP74/40	250/1	2.5	5
	CP74/40	600/1	5	10
CP74/50 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP74/50	150/5	1.5	2.5
	CP74/50	200/5	2.5	5
	CP74/50	250/5	2.5	5
	CP74/50	300/5	2.5	5
	CP74/50	400/5	2.5	5
	CP74/50	500/5	5	7.5
	CP74/50	600/5	5	7.5
	CP74/50	800/5	5	10
	CP74/50	1000/5	5	10
	CP74/50	500/1	5	10
	CP74/50	800/1	5	10
	CP74/50	1000/1	5	10

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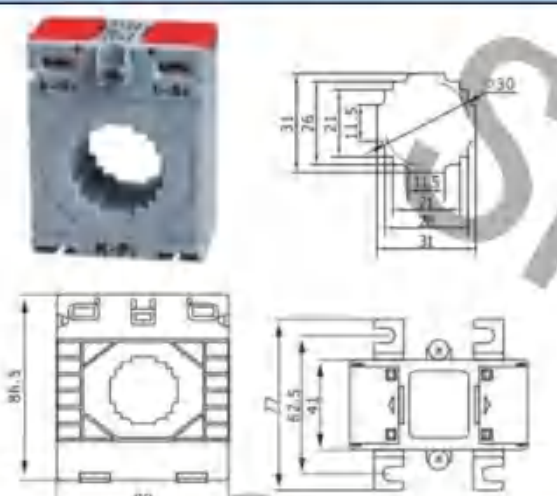
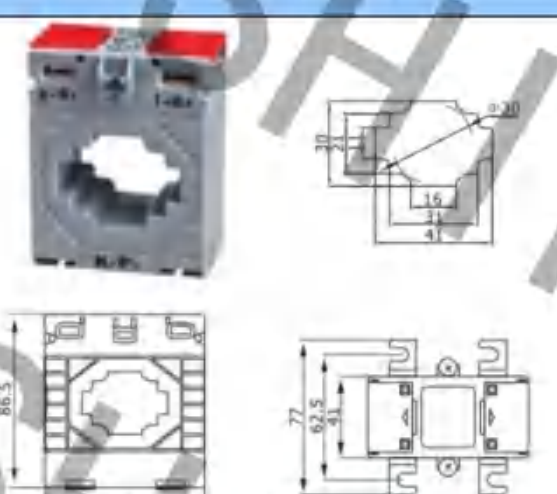
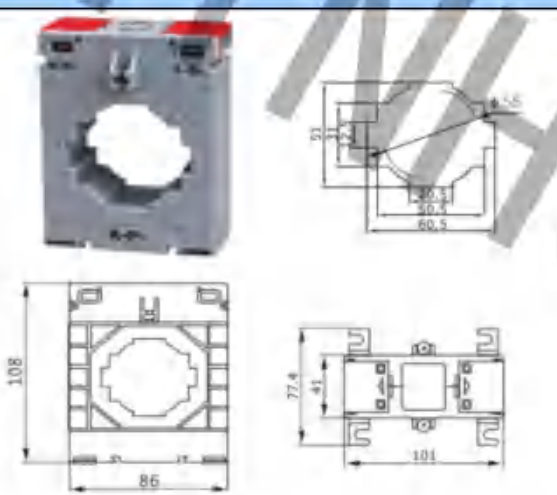
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CP80/30 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP80/30	30/5	---	2.5(4T)
	CP80/30	40/5	---	2.5(2T)
	CP80/30	50/5	---	2.5(2T)
	CP80/30	60/5	---	1.5
	CP80/30	75/5	---	1.5
	CP80/30	100/5	---	2.5
	CP80/30	150/5	2.5	3.75
	CP80/30	200/5	2.5	5
	CP80/30	250/5	5	5
	CP80/30	400/5	5	10
	CP80/30	50/1	2.5	5
	CP80/30	400/1	5	10
CP80/40 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
	CP83/40	100/5	---	2.5
	CP83/40	150/5	2.5	5
	CP83/40	200/5	2.5	5
	CP83/40	250/5	2.5	5
	CP83/40	300/5	2.5	5
	CP83/40	400/5	5	7.5
	CP83/40	500/5	5	7.5
	CP83/40	600/5	5	10
	CP83/40	800/5	5	10
	CP83/40	250/1	5	10
	CP83/40	500/1	5	10
	CP83/40	800/1	5	10
CP86/60 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
	CP86/60	400/5	3.75	5
	CP86/60	500/5	5	10
	CP86/60	600/5	5	10
	CP86/60	750/5	10	15
	CP86/60	800/5	10	15
	CP86/60	1000/5	10	15
	CP86/60	1200/5	10	15
	CP86/60	1500/5	10	15
	CP86/60	500/1	5	10
	CP86/60	800/1	5	10
	CP86/60	1000/1	5	15
	CP86/60	1500/1	10	15

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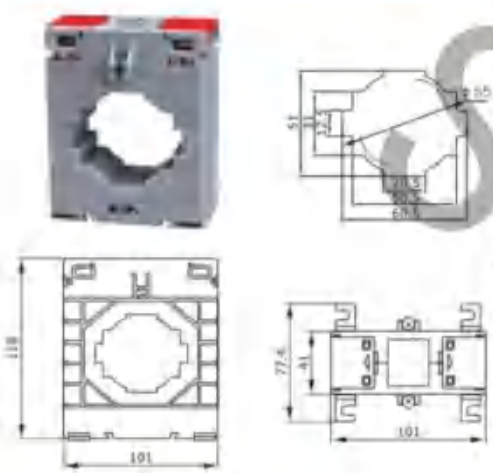
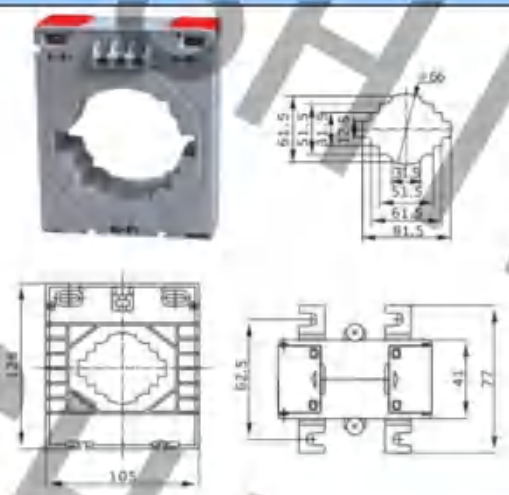
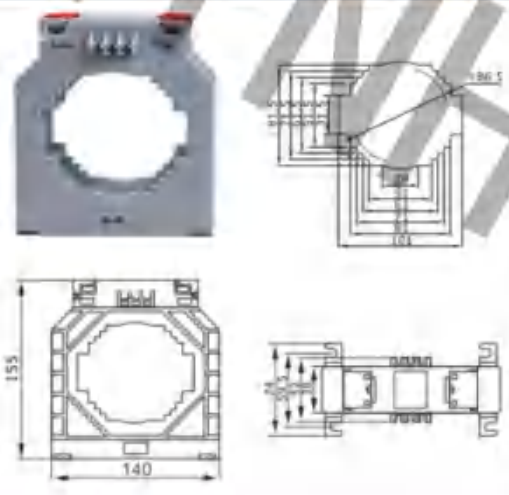
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Low Voltage Current Transformers

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CP100/60 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP100/60	400/5	3.75	5
	CP100/60	500/5	5	10
	CP100/60	600/5	5	10
	CP100/60	750/5	10	15
	CP100/60	800/5	10	15
	CP100/60	1000/5	10	15
	CP100/60	1200/5	10	15
	CP100/60	1500/5	10	15
	CP100/60	1600/5	10	15
	CP100/60	800/1	5	10
	CP100/60	1000/1	5	15
	CP100/60	1600/1	10	15
CP104/80 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP104/80	600/5	5	10
	CP104/80	750/5	5	10
	CP104/80	800/5	5	10
	CP104/80	1000/5	10	15
	CP104/80	1200/5	10	15
	CP104/80	1500/5	10	15
	CP104/80	1600/5	10	15
	CP104/80	1800/5	15	20
	CP104/80	2000/5	15	20
	CP104/80	800/1	5	10
	CP104/80	1000/1	5	15
	CP104/80	2000/1	10	15
CP140/100 & Dimensions(mm)	Model	Rated Current ratio(A)	Burden(VA)/Accuracy	
			0.5	1.0
	CP140/100	800/5	10	15
	CP140/100	1000/5	10	15
	CP140/100	1200/5	10	15
	CP140/100	1250/5	10	15
	CP140/100	1500/5	10	20
	CP140/100	1600/5	15	20
	CP140/100	2000/5	15	25
	CP140/100	2500/5	15	25
	CP140/100	3000/5	15	25
	CP140/100	800/1	10	10
	CP140/100	2000/1	15	15
	CP140/100	3000/1	15	25

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