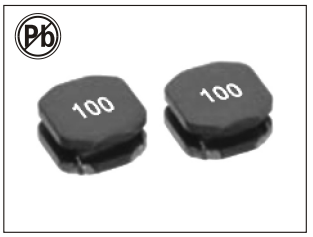
SMD Inductors(Coils)
For Power Line(Wound, Magnetic Shielded)
LPS4020 SERIES



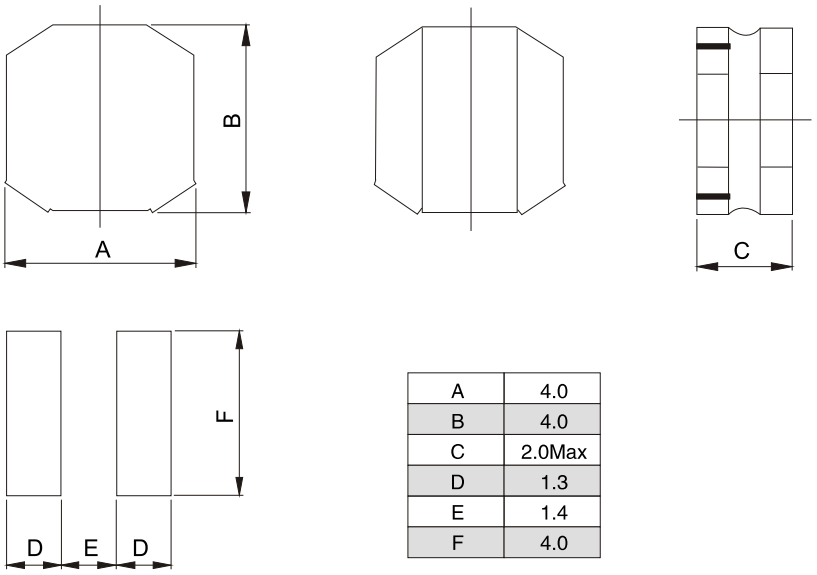
FEATURES:

- Magnetically shielded by magnetic powder molding
- Miniature size: Mount area: 4x4mm, Height: 2.0mm max.
- Generic use for portable DC to DC converter line.
- High magnetic shield construction should actualize high resolution for EMC protection.
- Available for automatic mounting in tape and real package.
- The products do not contain lead and support lead-free soldering.

APPLICATIONS:

- Cellular phones, DVCs, DSCs, PDAs, LCD displays, HDDs, etc

SHAPE AND DIMENSIONS Dimensions(mm)



A	4.0
B	4.0
C	2.0Max
D	1.3
E	1.4
F	4.0

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance (uH)	Inductance tolerarance %	Test frequency KHz	SRF MHz	DCR (Ω) ±20%	Rated current*	
						Saturation current	Based on temperature rise
LPS4020–1R0N	1.0	± 30	100	98	0.020	4.85	2.60
LPS4020–1R2N	1.2	± 30	100	86	0.020	4.58	2.50
LPS4020–1R5N	1.5	± 30	100	86	0.030	3.85	2.15
LPS4020–2R2N	2.2	± 30	100	49	0.040	3.40	1.85
LPS4020–3R3M	3.3	± 20	100	44	0.070	3.20	1.40
LPS4020–3R6M	3.6	± 20	100	49	0.055	2.80	1.54
LPS4020–4R7M	4.7	± 20	100	42	0.075	2.35	1.34
LPS4020–5R1M	5.1	± 20	100	42	0.085	2.30	1.27
LPS4020–5R6M	5.6	± 20	100	30	0.090	2.20	1.22
LPS4020–6R2M	6.2	± 20	100	36	0.115	2.15	1.08
LPS4020–6R8M	6.8	± 20	100	33	0.125	2.20	1.04

Notes:

1.All test data is referenced to 20℃ ambient.
2.Rated current: Isat or Irms, whichever is smaller.
3.Isat: DC current at which the inductance drops approximate 30% form its value without current.
4.Irms: DC current that causes the temperature rise (△T=40℃) form 20℃ ambient.

Part No.	Inductance (uH)	Inductance tolerarance %	Test frequency KHz	SRF MHz	DCR (Ω) ±20%	Rated current*	
						Saturation current	Based on temperature rise
LPS4020–7R5M	7.5	± 20	100	30	0.115	1.85	1.08
LPS4020–8R2M	8.2	± 20	100	27	0.125	1.75	1.04
LPS4020–100M	10	± 20	100	26	0.165	1.60	0.90
LPS4020–120M	12	± 20	100	26	0.175	1.50	0.88
LPS4020–150M	15	± 20	100	24	0.230	1.35	0.77
LPS4020–220M	22	± 20	100	15	0.350	1.05	0.62
LPS4020–270M	27	± 20	100	14	0.545	1.02	0.50
LPS4020–330M	33	± 20	100	11	0.550	0.85	0.49
LPS4020–390M	39	± 20	100	11	0.650	0.82	0.46
LPS4020–430M	43	± 20	100	10	0.660	0.77	0.45
LPS4020–470M	47	± 20	100	10	0.710	0.74	0.44
LPS4020–510M	51	± 20	100	10	0.750	0.70	0.42
LPS4020–560M	56	± 20	100	10	0.800	0.66	0.41
LPS4020–620M	62	± 20	100	9.6	0.900	0.65	0.39
LPS4020–680M	68	± 20	100	7.7	1.06	0.61	0.36
LPS4020–750M	75	± 20	100	7.7	1.12	0.60	0.35
LPS4020–820M	82	± 20	100	7.2	1.17	0.56	0.34
LPS4020–101M	100	± 20	100	6.3	1.35	0.52	0.31

Notes:

1.All test data is referenced to 20℃ ambient.
2.Rated current: Isat or Irms, whichever is smaller.
3.Isat: DC current at which the inductance drops approximate 30% form its value without current.
4.Irms: DC current that causes the temperature rise (△T=40℃) form 20℃ ambient.