

SMD Inductors(Coils) For Power Line(Wound, Magnetic Shielded) LPS6045 SERIES



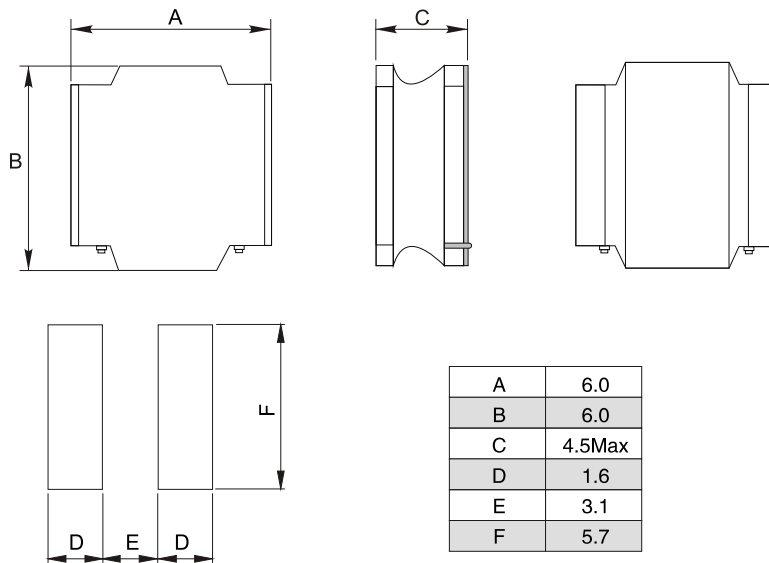
FEATURES:

- Magnetically shielded by magnetic powder molding
- Miniature size: Mount area: 6x6mm, Height: 4.5mm 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 reel 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)



ELECTRICAL CHARACTERISTICS:

Part No.	Inductance (uH)	Inductance tolerance %	Test frequency KHz	SRF MHz	DCR (Ω) ± 30%	Rated current*	
						Saturation current	Based on temperature rise
LPS6045-R82N	0.82	± 30	100	140	0.008	10.35	5.90
LPS6045-1R0N	1.0	± 30	100	100	0.010	9.85	5.14
LPS6045-1R2N	1.2	± 30	100	100	0.011	8.35	5.40
LPS6045-1R5N	1.5	± 30	100	65	0.012	8.80	4.95
LPS6045-1R8N	1.8	± 30	100	74	0.012	7.60	4.95
LPS6045-2R2N	2.2	± 30	100	52	0.014	6.75	4.60
LPS6045-2R7N	2.7	± 30	100	38	0.015	5.75	4.30
LPS6045-3R6N	3.6	± 30	100	28	0.021	5.25	3.70
LPS6045-4R3M	4.3	± 20	100	23	0.023	4.45	3.50
LPS6045-4R7M	4.7	± 20	100	24	0.026	4.97	3.30

Part No.	Inductance (uH)	Inductance tolerance %	Test frequency KHz	SRF MHz	DCR (Ω) ± 30%	Rated current*	
						Saturation current	Based on temperature rise
LPS6045-5R1M	5.1	± 20	100	23	0.026	4.40	3.30
LPS6045-5R6M	5.6	± 20	100	23	0.029	4.15	3.15
LPS6045-6R2M	6.2	± 20	100	26	0.031	4.43	3.00
LPS6045-6R8M	6.8	± 20	100	20	0.031	3.90	3.00
LPS6045-7R5M	7.5	± 20	100	18	0.034	3.50	2.90
LPS6045-8R2M	8.2	± 20	100	21	0.043	3.90	2.60
LPS6045-9R1M	9.1	± 20	100	17	0.043	3.35	2.60
LPS6045-100M	10	± 20	100	15	0.048	3.20	2.45
LPS6045-120M	12	± 20	100	13	0.058	2.80	2.20
LPS6045-150M	15	± 20	100	12	0.068	2.50	2.05
LPS6045-180M	18	± 20	100	10	0.081	2.20	1.85
LPS6045-220M	22	± 20	100	10	0.089	2.05	1.80
LPS6045-270M	27	± 20	100	9.2	0.102	1.90	1.65
LPS6045-300M	30	± 20	100	7.8	0.132	1.70	1.50
LPS6045-330M	33	± 20	100	7.8	0.137	1.65	1.45
LPS6045-390M	39	± 20	100	7.8	0.180	1.50	1.25
LPS6045-430M	43	± 20	100	7.7	0.200	1.63	1.20
LPS6045-470M	47	± 20	100	6.4	0.200	1.40	1.20
LPS6045-510M	51	± 20	100	6.4	0.207	1.35	1.15
LPS6045-560M	56	± 20	100	6.4	0.221	1.30	1.10
LPS6045-620M	62	± 20	100	6.4	0.235	1.25	1.10
LPS6045-680M	68	± 20	100	6.4	0.289	1.20	1.00
LPS6045-750M	75	± 20	100	5.0	0.305	1.15	0.95
LPS6045-820M	82	± 20	100	4.9	0.341	1.05	0.90
LPS6045-910M	91	± 20	100	4.9	0.359	1.00	0.85
LPS6045-101M	100	± 20	100	4.2	0.433	0.95	0.80
LPS6045-121M	120	± 20	100	4.2	0.484	0.85	0.77
LPS6045-151M	150	± 20	100	4.2	0.580	0.80	0.70
LPS6045-221M	220	± 20	100	3.5	0.834	0.70	0.59
LPS6045-331M	330	± 20	100	2.8	1.000	0.57	0.57

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 ($\Delta T=40^{\circ}\text{C}$) form 20℃ ambient.