SD5D18 TYPE

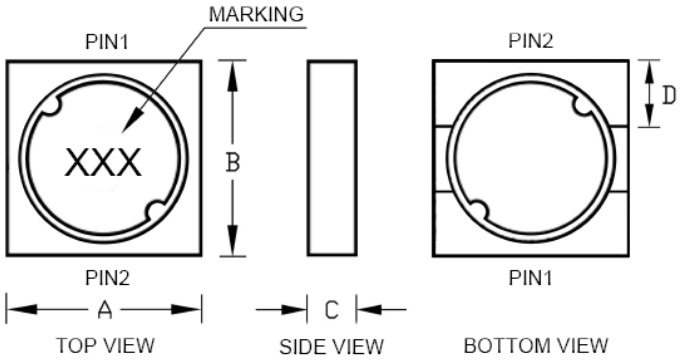
●FEATURE

1. Low profile and small size(Height=1.80MAX)
2. Low DC resistance
3. Magnetic Shielding type

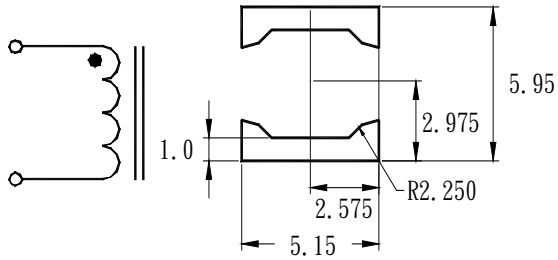
●Applications

1. Digital camera, PDA and others portable

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=5.30m/m MAX ; B=5.30m/m MAX ; C=1.80m/m MAX ; MARKING= Inductance value

●Specification

Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
SD5D18-R47N	0.47±30%	R47	0.0201	4.63	3.58
SD5D18-R82N	0.82±30%	R82	0.0247	3.60	3.24
SD5D18-1R2N	1.2±30%	1R2	0.0294	2.95	2.97
SD5D18-1R5N	1.5±30%	1R5	0.0345	2.49	2.73
SD5D18-2R2N	2.2±30%	2R2	0.0398	2.16	2.55
SD5D18-3R3N	3.3±30%	3R3	0.0605	1.71	2.07
SD5D18-4R7N	4.7±30%	4R7	0.0824	1.54	1.77
SD5D18-6R2N	6.2±30%	6R2	0.1000	1.30	1.61
SD5D18-8R2N	8.2±30%	8R2	0.1351	1.12	1.38
SD5D18-100M	10±20%	100	0.1584	0.982	1.28
SD5D18-150M	15±20%	150	0.2278	0.831	1.06
SD5D18-220M	22±20%	220	0.3366	0.689	0.876
SD5D18-330M	33±20%	330	0.5057	0.568	0.715
SD5D18-470M	47±20%	470	0.7732	0.470	0.578
SD5D18-680M	68±20%	680	0.9798	0.390	0.514
SD5D18-820M	82±20%	820	1.30	0.356	0.446

Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
SD5D18-101M	100±20%	101	1.47	0.321	0.419
SD5D18-151M	150±20%	151	2.18	0.263	0.345
SD5D18-221M	220±20%	221	2.95	0.217	0.296
SD5D18-331M	330±20%	331	4.20	0.177	0.248
SD5D18-471M	470±20%	471	6.39	0.148	0.201
SD5D18-681M	680±20%	681	9.28	0.124	0.167
SD5D18-821M	820±20%	821	12.35	0.113	0.145
SD5D18-102M	1000±20%	102	14.01	0.102	0.136

Note1. Measurement frequency of Inductance value : at 100KHz

Note2. Measurement ambient temperature of L, DCR and IDC : at 25℃

Note3. Isat: DC current at which the inductance drops 30% from its value without current

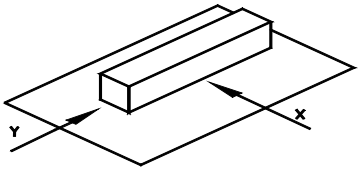
Note4. Irms: Average current for 40℃ temperature rise from 25℃ ambient

Note5. Inductance tolerance: M: ±20%

Note6.Packaging: Taping ; Quantity: 1000 Piece/reel

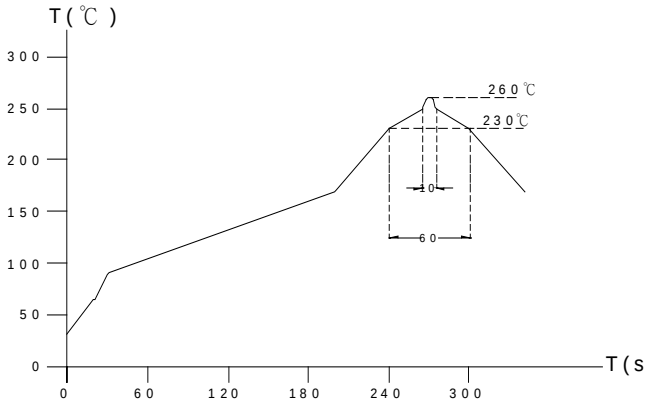
GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 105℃(Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below conditions.
   Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/℃(-25~+80℃ degree Celsius), inductance deviation within±5.0%, after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2℃and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260℃, 10 seconds(See attached recommend reflow)
11. Storage condition: Temperature Range: 0℃ ~ 35℃；-40℃ ~ 105℃ (after PCB)，Humidity Range: 50% ~ 70% RH
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

