SD5D□□ TYPE

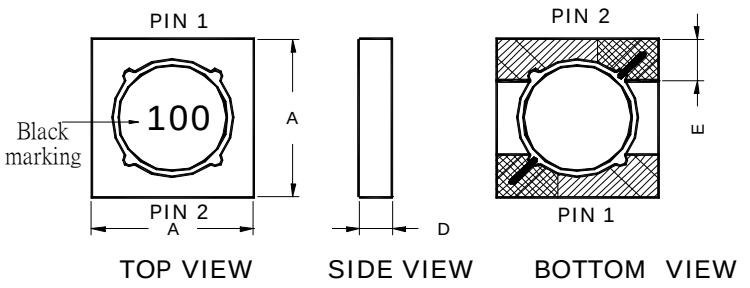
●FEATURE

1. Low profile and small size
2. Low DC resistance
3. Magnetic Shielding type

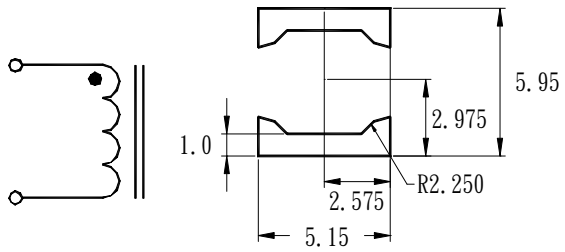
●Applications

1. LCD panels
2. Digital camera,PDA and others portable

●Shape and Dimension



●Schematics and Land Patterns(mm)



●Specification

Dimension in m/m

TYPE	A	D	E
SD5D12	5.30MAX	1.20MAX	1.50
SD5D14	5.30MAX	1.45MAX	1.50
SD5D18	5.30MAX	1.80MAX	1.50
SD5D20	5.30MAX	2.00MAX	1.50
SD5D25	5.30MAX	2.50MAX	1.50

Note1. Measurement frequency of Inductance value : at 100KHz, 0.1V

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. Ordering Code: TYPE NAME: SD5D□□

Main Inductance: 100 (10uH)

Tolerance : M (±20%)

Note7. This specification might be changed without notice due to under developing and improving.

Thank you for your understanding.

Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
SD5D12-R47M	0.47±20%	R47	0.0246	3.86	3.19
SD5D12-1R2M	1.20±20%	1R2	0.0366	2.45	2.62
SD5D12-1R5M	1.50±20%	1R5	0.0521	2.08	2.19
SD5D12-2R2M	2.20±20%	2R2	0.0747	1.80	1.83
SD5D12-3R3M	3.30±20%	3R3	0.1043	1.42	1.55
SD5D12-4R7M	4.70±20%	4R7	0.1177	1.29	1.46
SD5D12-6R2M	6.20±20%	6R2	0.1699	1.08	1.21
SD5D12-8R2M	8.20±20%	8R2	0.2399	0.931	1.02
SD5D12-100M	10±20%	100	0.2844	0.818	0.938
SD5D12-150M	15±20%	150	0.4089	0.692	0.782
SD5D12-220M	22±20%	220	0.6338	0.574	0.628
SD5D12-330M	33±20%	330	0.9289	0.474	0.519
SD5D12-470M	47±20%	470	1.37	0.391	0.428
SD5D12-680M	68±20%	680	2.16	0.325	0.341
SD5D12-820M	82±20%	820	2.36	0.297	0.326
SD5D12-101M	100±20%	101	2.64	0.273	0.308
SD5D12-151M	150±20%	151	3.96	0.220	0.251
SD5D12-221M	220±20%	221	4.76	0.181	0.229
SD5D12-331M	330±20%	331	7.25	0.148	0.186
SD5D12-471M	470±20%	471	8.95	0.126	0.167
SD5D12-681M	680±20%	681	11.30	0.104	0.149
SD5D12-821M	820±20%	821	14.93	0.095	0.129
SD5D12-102M	1000±20%	102	17.20	0.086	0.121
Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
SD5D14-R58M	0.58±20%	R58	0.0220	4.84	3.52
SD5D14-R87M	0.87±20%	R87	0.0243	3.96	3.20
SD5D14-1R2M	1.2±20%	1R2	0.0344	3.35	2.70
SD5D14-1R5M	1.5±20%	1R5	0.0390	2.91	2.53
SD5D14-2R0M	2.0±20%	2R0	0.0445	2.56	2.37
SD5D14-2R5M	2.5±20%	2R5	0.0595	2.29	2.05
SD5D14-3R2M	3.2±20%	3R2	0.0663	2.08	1.94
SD5D14-4R5M	4.5±20%	4R5	0.0935	1.74	1.64
SD5D14-6R9M	6.9±20%	6R9	0.1363	1.41	1.35
SD5D14-8R8M	8.8±20%	8R8	0.1913	1.25	1.14

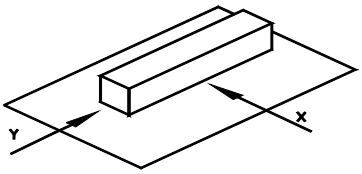
Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
SD5D14-100M	10±20%	100	0.2058	1.18	1.10
SD5D14-150M	15±20%	150	0.2609	0.969	0.98
SD5D14-220M	22±20%	220	0.3853	0.793	0.806
SD5D14-330M	33±20%	330	0.5852	0.651	0.654
SD5D14-470M	47±20%	470	0.9055	0.538	0.525
SD5D14-680M	68±20%	680	1.11	0.449	0.474
SD5D14-820M	82±20%	820	1.50	0.407	0.408
SD5D14-101M	100±20%	101	1.68	0.373	0.386
SD5D14-151M	150±20%	151	2.52	0.301	0.315
SD5D14-221M	220±20%	221	3.77	0.249	0.258
SD5D14-331M	330±20%	331	5.92	0.203	0.206
SD5D14-471M	470±20%	471	8.34	0.171	0.173
SD5D14-681M	680±20%	681	10.3	0.142	0.156
SD5D14-821M	820±20%	821	13.9	0.129	0.134
SD5D14-102M	1000±20%	102	15.8	0.117	0.126
Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
SD5D18-R47M	0.47±20%	R47	0.0201	4.63	3.58
SD5D18-R82M	0.82±20%	R82	0.0247	3.60	3.24
SD5D18-1R2M	1.2±20%	1R2	0.0294	2.95	2.97
SD5D18-1R5M	1.5±20%	1R5	0.0345	2.49	2.73
SD5D18-2R2M	2.2±20%	2R2	0.0398	2.16	2.55
SD5D18-3R3M	3.3±20%	3R3	0.0605	1.71	2.07
SD5D18-4R7M	4.7±20%	4R7	0.0824	1.54	1.77
SD5D18-6R2M	6.2±20%	6R2	0.1000	1.30	1.61
SD5D18-8R2M	8.2±20%	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
SD5D18-101M	100±20%	101	1.47	0.321	0.419
SD5D18-151M	150±20%	151	2.18	0.263	0.345

Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
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
Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
SD5D20-R47M	0.47±20%	R47	0.0200	4.00	3.59
SD5D20-1R2M	1.2±20%	1R2	0.0275	2.55	3.07
SD5D20-1R5M	1.5±20%	1R5	0.0312	2.15	2.88
SD5D20-2R2M	2.2±20%	2R2	0.0429	1.87	2.45
SD5D20-3R3M	3.3±20%	3R3	0.0547	1.47	2.17
SD5D20-4R7M	4.7±20%	4R7	0.0612	1.33	2.05
SD5D20-6R2M	6.2±20%	6R2	0.0720	1.12	1.89
SD5D20-8R2M	8.2±20%	8R2	0.1000	0.966	1.61
SD5D20-100M	10±20%	100	0.1100	1.000	1.53
SD5D20-150M	15±20%	150	0.1655	0.718	1.25
SD5D20-220M	22±20%	220	0.2053	0.596	1.12
SD5D20-330M	33±20%	330	0.3100	0.491	0.913
SD5D20-470M	47±20%	470	0.4650	0.406	0.745
SD5D20-680M	68±20%	680	0.6947	0.337	0.610
SD5D20-820M	82±20%	820	0.7785	0.308	0.576
SD5D20-101M	100±20%	101	1.06	0.283	0.495
SD5D20-151M	150±20%	151	1.37	0.228	0.435
SD5D20-221M	220±20%	221	2.04	0.188	0.356
SD5D20-331M	330±20%	331	2.99	0.155	0.294
SD5D20-471M	470±20%	471	3.74	0.129	0.263
SD5D20-681M	680±20%	681	5.56	0.107	0.216
SD5D20-821M	820±20%	821	6.22	0.098	0.204
SD5D20-102M	1000±20%	102	8.73	0.088	0.172

Part Number	L (uH)	Marking	DCR (ΩTyp.)	Isat (A)	Irms (A)
SD5D25-R47M	0.47±20%	R47	0.0177	6.00	3.88
SD5D25-R82M	0.82±20%	R82	0.0208	4.67	3.58
SD5D25-1R2M	1.2±20%	1R2	0.0240	3.81	3.33
SD5D25-1R5M	1.5±20%	1R5	0.0274	3.23	3.12
SD5D25-2R2M	2.2±20%	2R2	0.0311	2.80	2.93
SD5D25-3R3M	3.3±20%	3R3	0.0384	2.21	2.64
SD5D25-4R7M	4.7±20%	4R7	0.0467	1.83	2.39
SD5D25-6R8M	6.8±20%	6R8	0.0556	1.56	2.19
SD5D25-8R2M	8.2±20%	8R2	0.0724	1.45	1.92
SD5D25-100M	10±20%	100	0.0824	1.27	1.80
SD5D25-150M	15±20%	150	0.0956	1.08	1.67
SD5D25-220M	22±20%	220	0.1478	0.857	1.34
SD5D25-330M	33±20%	330	0.2149	0.711	1.11
SD5D25-470M	47±20%	470	0.3156	0.592	0.919
SD5D25-680M	68±20%	680	0.4850	0.482	0.741
SD5D25-820M	82±20%	820	0.5242	0.441	0.713
SD5D25-101M	100±20%	101	0.5937	0.398	0.670
SD5D25-151M	150±20%	151	0.8723	0.328	0.553
SD5D25-221M	220±20%	221	1.34	0.268	0.446
SD5D25-331M	330±20%	331	2.07	0.219	0.359
SD5D25-471M	470±20%	471	3.10	0.184	0.293
SD5D25-681M	680±20%	681	3.88	0.154	0.262
SD5D25-821M	820±20%	821	5.04	0.139	0.230
SD5D25-102M	1000±20%	102	5.70	0.126	0.216

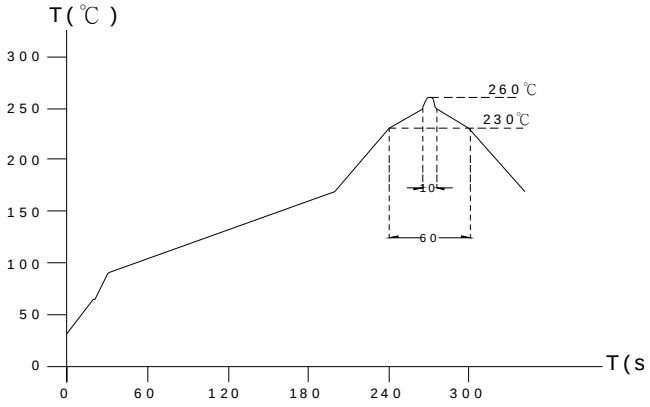
GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 85℃(Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no 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℃).
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 environment: Storage condition: Temperature Range: 10℃ ~ 35℃ (Generally: 21℃ ~ 31℃) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35℃ ~ 85℃ , Humidity Range: 50% ~ 95% RH
12. Use components within 6 months. If 6 months or more have elapsed, check soldarability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

