

SD5D12 TYPE

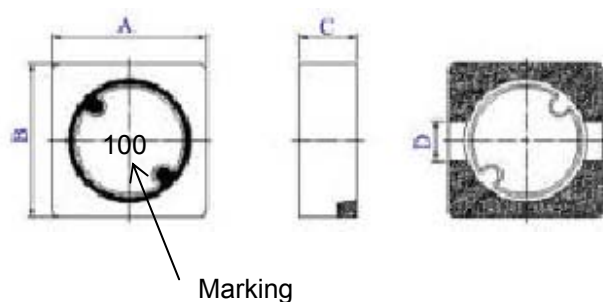
●FEATURE

1. Low profile and small size(Height=1.20MAX)
2. Low DC resistance
3. Magnetic Shielding type

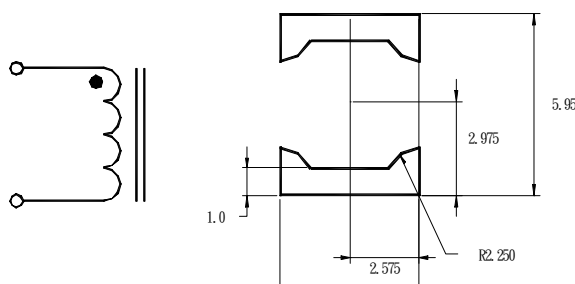
●Applications

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

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=5.30m/m MAX ; B=5.30m/m MAX ; C=1.20m/m MAX ; MARKING= Inductance value

●Specification

Part Number	L(uH)	Marking	DCR(ΩMAX)	IDC(A)(Max)
SD5D12-1R5M	1.5±20%	1R5	0.100	2.080
SD5D12-2R2M	2.2±20%	2R2	0.120	1.800
SD5D12-3R3M	3.3±20%	3R3	0.150	1.420
SD5D12-4R7M	4.7±20%	4R7	0.270	1.090
SD5D12-6R8M	6.8±20%	6R8	0.350	1.000
SD5D12-8R2M	8.2±20%	8R2	0.410	0.900
SD5D12-100M	10±20%	100	0.420	0.818
SD5D12-120M	12±20%	120	0.500	0.750
SD5D12-150M	15±20%	150	0.560	0.692
SD5D12-220M	22±20%	220	0.850	0.574
SD5D12-330M	33±20%	330	1.430	0.474

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

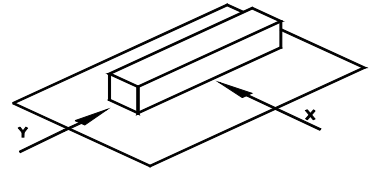
Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. IDC : This indicates the value of current when the inductances is 20% lower than its initial value at D.C. superimposition or D.C. current when at $\Delta t=40^{\circ}\text{C}$, which is lower.($T_a=20^{\circ}\text{C}$)

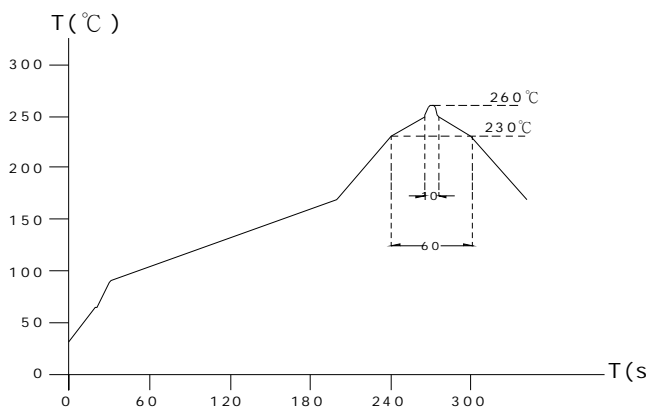
Note4.Packaging: Taping ; Quantity: 1000 Piece/reel

GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO $+85^{\circ}\text{C}$ (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.Y withstanding at below conditions.
Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.
4. Insulating resistance: Over $100\text{M}\Omega$ 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 $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ ($-25\sim +80^{\circ}\text{C}$).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in $90\sim 95\%$ relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration ($10\sim 55\sim 10$ Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s^2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C , 10 seconds(See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: $10^{\circ}\text{C} \sim 35^{\circ}\text{C}$ (Generally: $21^{\circ}\text{C} \sim 31^{\circ}\text{C}$) , Humidity Range: $50\% \sim 80\% \text{RH}$ (Generally: $65\% \sim 75\%$) ; Transportation condition: Temperature Range: $-35^{\circ}\text{C} \sim 85^{\circ}\text{C}$, Humidity Range: $50\% \sim 95\% \text{RH}$
12. Use components within 6 months. If 6 months or more have elapsed, check solderability before use.
13. Reflow profile recommend(1 cycle):



Lead-free heat endurance test



Lead-free the recommended reflow condition

