SDIA5030 TYPE

•FEATURE

1. Low profile and small size (Height: 3.00mm Max)

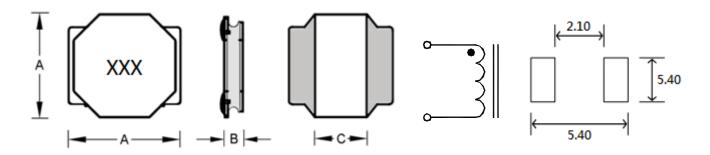
Applications

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

Shape and Dimension

Schematics and Land Patterns(mm)

SLIM INDUCTOR-RoHS



A=5.00±0.40m/m; B=3.00 m/m Max(do not include solder); C= 2.00m/m REF

Specification

Part Number	L(uH)	STAMP	DCR(Ω±30%)	Isat(A)	Irms
SDIA5030-R47N	0.47	R47	0.010	9.00	5.00
SDIA5030-1R0N	1.0	1R0	0.015	6.60	4.00
SDIA5030-2R2N	2.2	2R2	0.023	4.20	3.50
SDIA5030-3R3M	3.3	3R3	0.030	3.60	3.00
SDIA5030-4R7M	4.7	4R7	0.035	3.10	2.60
SDIA5030-6R8M	6.8	6R8	0.052	2.50	2.30
SDIA5030-100M	10	100	0.070	2.10	1.70
SDIA5030-150M	15	150	0.125	1.60	1.40
SDIA5030-220M	22	220	0.180	1.40	1.05
SDIA5030-330M	33	330	0.300	1.15	0.80
SDIA5030-470M	47	470	0.450	0.95	0.70

Note1. Measurement frequency of Inductance value: at 100KHz, 0.25V

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

Note3. Inductance Tolerance: N: ±30%; M: ±20%

Note4. Isat : $\triangle L/L \le 30\%$ (This indicates the value of current when the inductances is 30% lower than its initial

value at D.C. superimposition)

Note5. Irms : D.C. current when at $\Delta t=40^{\circ}$ C (typ.).(Ta=25°C)

Note6.Packaging: Taping; Quantity: 2000 Pieces/reel

GENERAL CHARACTERISTICS

- 1. Operating temperature range: -40 TO + 105°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 $100M\Omega$ 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 (0~2,000)x10-6/°C (-25~+80°C degree Celsius), inductance deviation within±5.0%, after 96 hours.
- Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°C 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°C, 10 seconds(See attached recommend reflow)
- 11. Storage condition: Temperature Range: 0° ~ 35° ; -40 $^{\circ}$ ~ 105 $^{\circ}$ (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

