

## SDIA3010 TYPE

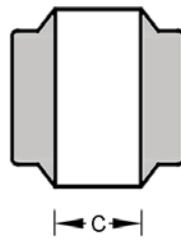
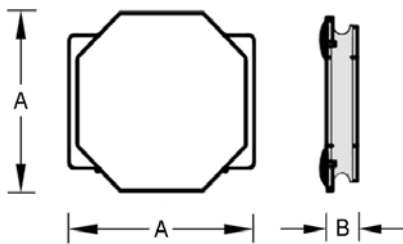
### ●FEATURE

1. Low profile and small size (Height: 1.00mm Max)
2. Low DC resistance

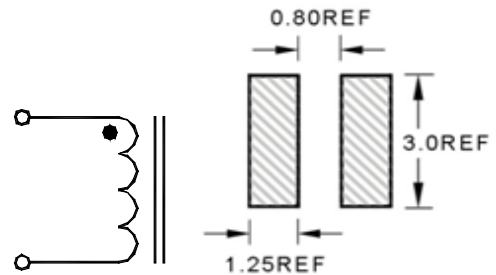
### ●Applications

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

### ●Shape and Dimension



### ●Schematics and Land Patterns(mm)



A=3.00±0.20m/m ; B= 1.00m/m MAX ; C= 1.60m/m REF.

### ●Specification

Part Number	L(uH)	DCR(ΩMax)	Isat(mA)	Irms(mA)
SDIA3010-1R0N	1.0±30%	0.078	1300	1400
SDIA3010-1R5N	1.5±30%	0.096	1200	1300
SDIA3010-2R2M	2.2±20%	0.114	1200	1200
SDIA3010-3R3M	3.3±20%	0.168	870	1000
SDIA3010-4R7M	4.7±20%	0.228	900	900
SDIA3010-6R8M	6.8±20%	0.360	610	630
SDIA3010-100M	10±20%	0.540	500	510
SDIA3010-150M	15±20%	0.888	400	400
SDIA3010-220M	22±20%	0.924	350	350
SDIA3010-330M	33±20%	1.860	260	275
SDIA3010-470M	47±20%	2.460	220	235

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

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

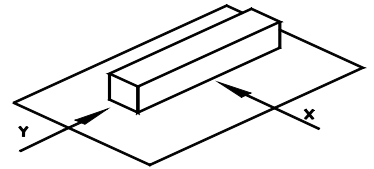
Note3. Isat :  $\Delta L/L \leq 30\%$  (This indicates the value of current when the inductance is 30% lower than it's initial value at D.C. superimposition)

Note4. Irms : D.C. current when at  $\Delta t=40^\circ\text{C}$  (typ.). ( $T_a=25^\circ\text{C}$ )

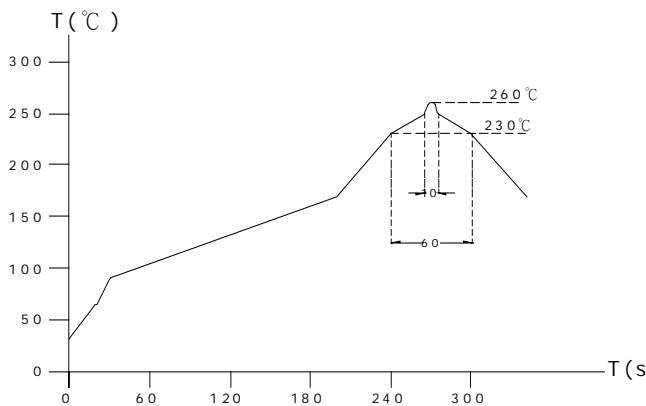
Note5. Packaging: Taping ; Quantity: 2000 Pieces/reel

## 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 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  $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within  $\pm 5\%$ , after 96 hours in 90~95% 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 (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within  $\pm 5\%$ , after being dropped once with 981m/s<sup>2</sup> (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°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% 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

