# Low Profile Shielded SMD Chip Power Inductor

ASPI-2510 series





#### > FEATURES:

- Small size and low profile: 1.0mm
- · Small DCR and high rated current
- High reliability to mechanical stress
- · Magnetically shielded by magnetic powder molding
- Suitable for RoHS reflow profile

### **► APPLICATIONS:**

- Mobile phones
- MP3 & 4 and other portable communication equipment
- Digital cameras.

## **ELECTRICAL SPECIFICATIONS:**

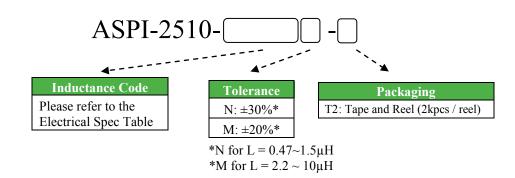
Abracon P/N:	ASPI-2510 Series
Operating Temperature & Humidity:	-25°C to +120°C (Including self generated heat)
Storage Temperature & Humidity:	-10°C to +40°C, 30% to 70% RH

Part Number	Inductance	DCR	Saturation Current	Temperature Rise Current
Units	μН	$m\Omega \pm 20\%$	A	A
Symbol	L	DCR	Isat*	Irms*
ASPI-2510-R47	0.47	38	2.50	2.65
ASPI-2510-R68	0.68	52	2.05	2.20
ASPI-2510-1R0	1.0	70	1.75	1.90
ASPI-2510-1R5	1.5	107	1.45	1.50
ASPI-2510-2R2	2.2	158	1.20	1.20
ASPI-2510-3R3	3.3	229	0.94	1.00
ASPI-2510-4R7	4.7	332	0.80	0.82
ASPI-2510-6R8	6.8	443	0.68	0.71
ASPI-2510-100	10.0	712	0.56	0.55

#### **Test Conditions**

- 1. Inductance is measured in HP-4285A Precision LCR Meter.
- 2. RDC is measured in DU-5011 milli ohm meter.(or equivalent).
- 3. Isat : Based on inductance change ( $\Delta$  L/Lo :  $\leq$  -30%)
- 4. Irms : Based on temperature rise ( $\Delta T : 40^{\circ}C TYP$ .)
- 5. Test Freq: 100KHz, 1Vrms

### > OPTIONS AND PART IDENTIFICATION







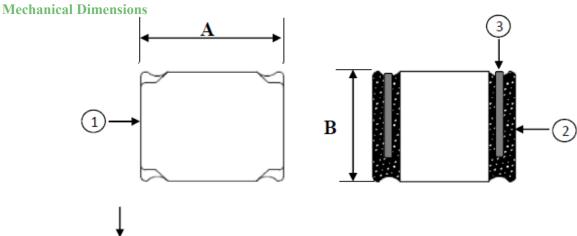
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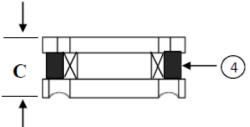
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# **OUTLINE DRAWING:**



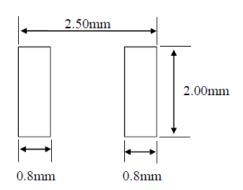


A	В	C Max.
2.5±0.1	2.0±0.1	1.0

#### **Circuit Schematic**

No Polarity

#### **Recommended Land Pattern**



### **Materials**

No	Part Name	Material
1	Ferrite core	Ni-Zn Ferrite
2	Terminals	Ag/Ni/Sn
3	Coil	Cu/P180 Grd 1
4	Adhesive	Silicon Base Resin
	Magnetic Powder	Ni-Zn Ferrite

Dimension: mm



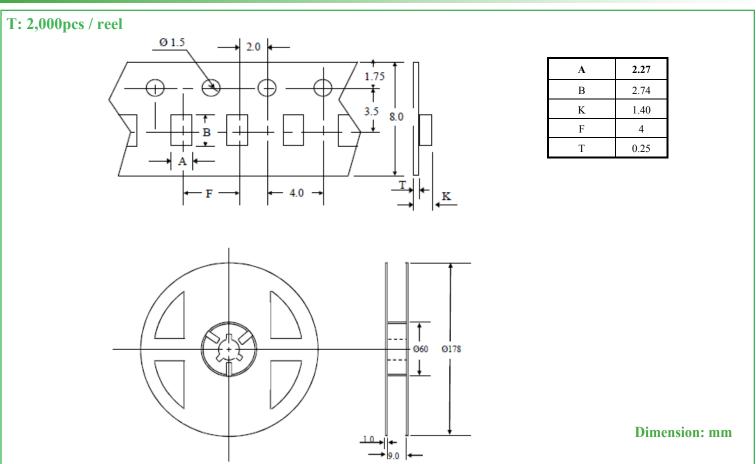
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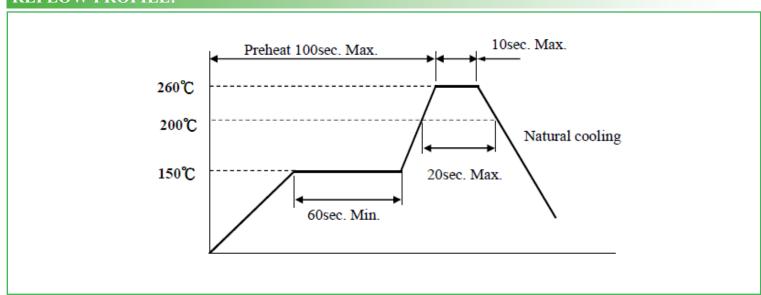




## **► TAPE & REEL:**



# **REFLOW PROFILE:**



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