

# Low Profile Shielded SMD Chip Power Inductor



2.5 x 2.0 x 1.2mm



**RoHS**  
Compliant

ASPI-2512 series

## FEATURES:

- Small size and low profile: 1.2mm
- 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-2512 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 ASPI-2512-Inductance Code	Inductance	Inductance Tolerance	DCR	Saturation Current	Temperature Rise Current
Units	μH	%	mΩ ± 20%	A	A
Symbol	L	M, N	DCR	Isat	Irms
ASPI-2512-R47	0.47	N	47	2.75	2.15
ASPI-2512-1R0	1.0	N	73	2.20	1.70
ASPI-2512-1R5	1.5	N	105	1.80	1.45
ASPI-2512-2R2	2.2	M	129	1.55	1.30
ASPI-2512-3R3	3.3	M	227	1.25	0.98
ASPI-2512-4R7	4.7	M	338	1.05	0.81
ASPI-2512-6R8	6.8	M	510	0.85	0.65
ASPI-2512-100	10.0	M	630	0.73	0.59

## 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 ( $\Delta L/L_0 \leq -30\%$ )
4. Irms : Based on temperature rise ( $\Delta T : 40^\circ\text{C TYP.}$ )
5. Test Freq: 100KHz, 1Vrms

## OPTIONS AND PART IDENTIFICATION

ASPI-2512- [ ] [ ] - [ ]

### Inductance Code

Please refer to the  
Electrical Spec Table

### Tolerance

N: ±30%\*  
M: ±20%\*

### Packaging

T2: Tape and Reel (2kpcs / reel)

\*N for L = 0.47~1.5μH

\*M for L = 2.2 ~ 10μH

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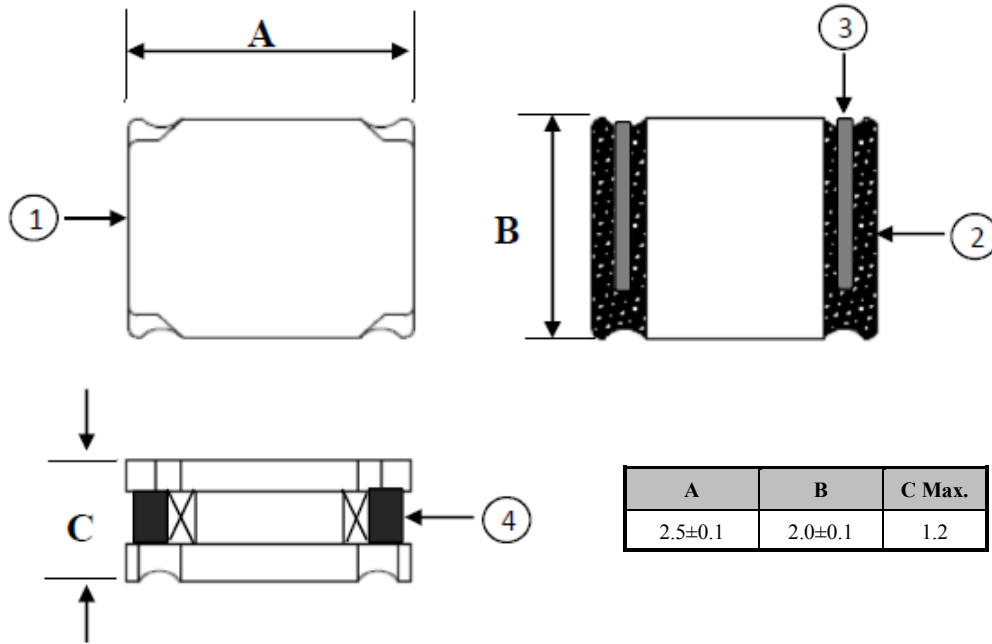
RoHS  
Compliant



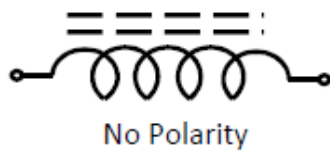
2.5 x 2.0 x 1.2mm

## OUTLINE DRAWING:

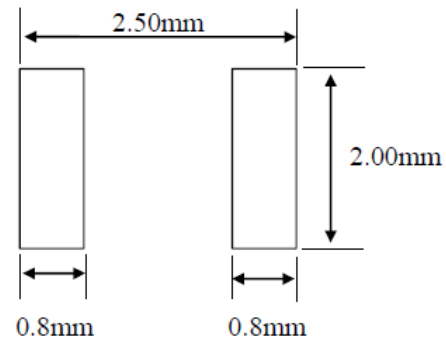
### Mechanical Dimensions



### Circuit Schematic



### 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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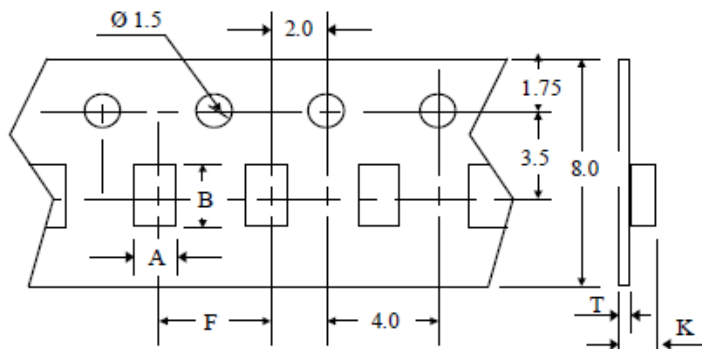
RoHS  
Compliant



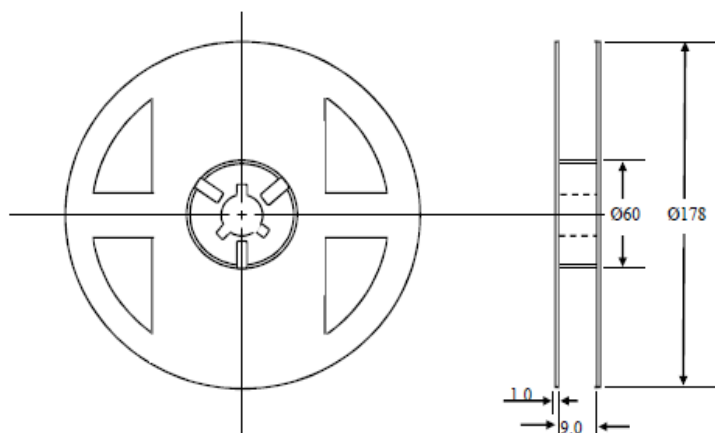
2.5 x 2.0 x 1.2mm

## TAPE & REEL:

T: 2,000pcs / reel

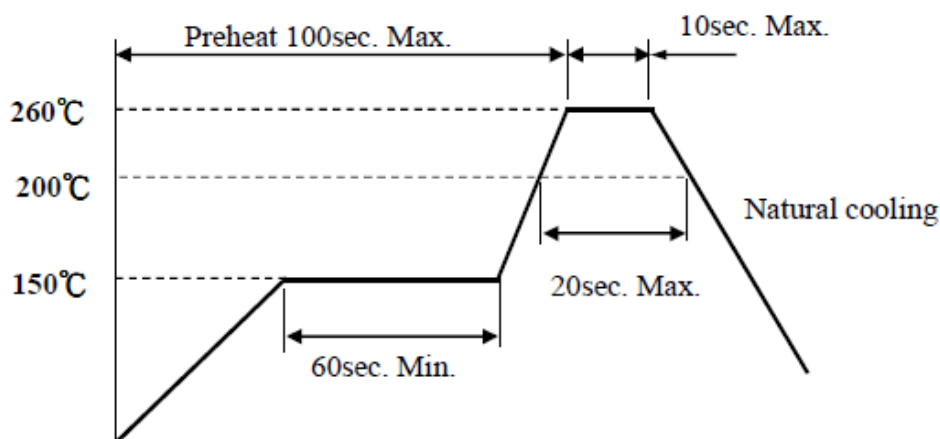


A	2.27
B	2.74
K	1.40
F	4
T	0.25



Dimension: mm

## REFLOW PROFILE:



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