

# Low Profile Shielded SMD Chip Power Inductor

ASPI-2512 series



**RoHS**  
Compliant



2.5 x 2.0 x 1.2mm

## 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:

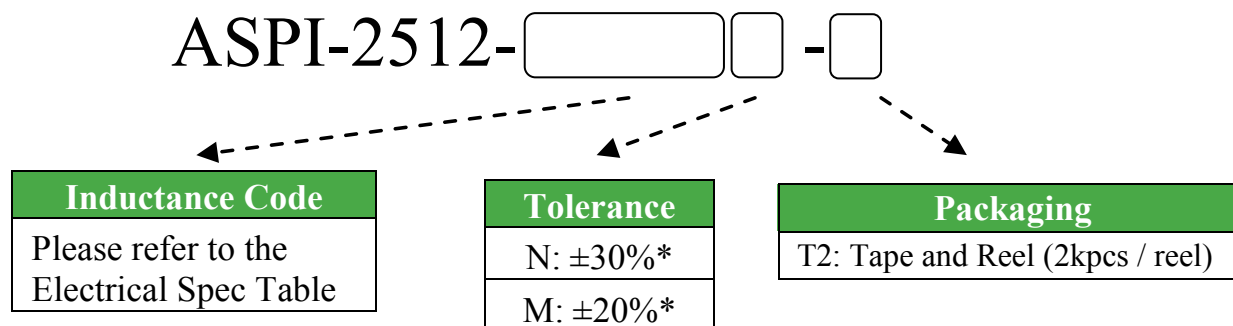
Abracon P/N:	ASPI-2512 Series
Operating Temperature & Humidity :	-25°C to +120°C (Including self generated heat)
Storage Temperature & Humidity:	-10°C to +40°C, 30% to 70% RH

Part Number	Inductance	DCR	Saturation Current	Temperature Rise Current
Units	μH	mΩ ± 20%	A	A
Symbol	L	DCR	Isat*	Irms*
ASPI-2512-R47	0.47	47	2.75	2.15
ASPI-2512-1R0	1.0	73	2.20	1.70
ASPI-2512-1R5	1.5	105	1.80	1.45
ASPI-2512-2R2	2.2	129	1.55	1.30
ASPI-2512-3R3	3.3	227	1.25	0.98
ASPI-2512-4R7	4.7	338	1.05	0.81
ASPI-2512-6R8	6.8	510	0.85	0.65
ASPI-2512-100	10.0	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



\*N for L = 0.47~1.5μH

\*M for L = 2.2 ~ 10μH



# Low Profile Shielded SMD Chip Power Inductor

ASPI-2512 series



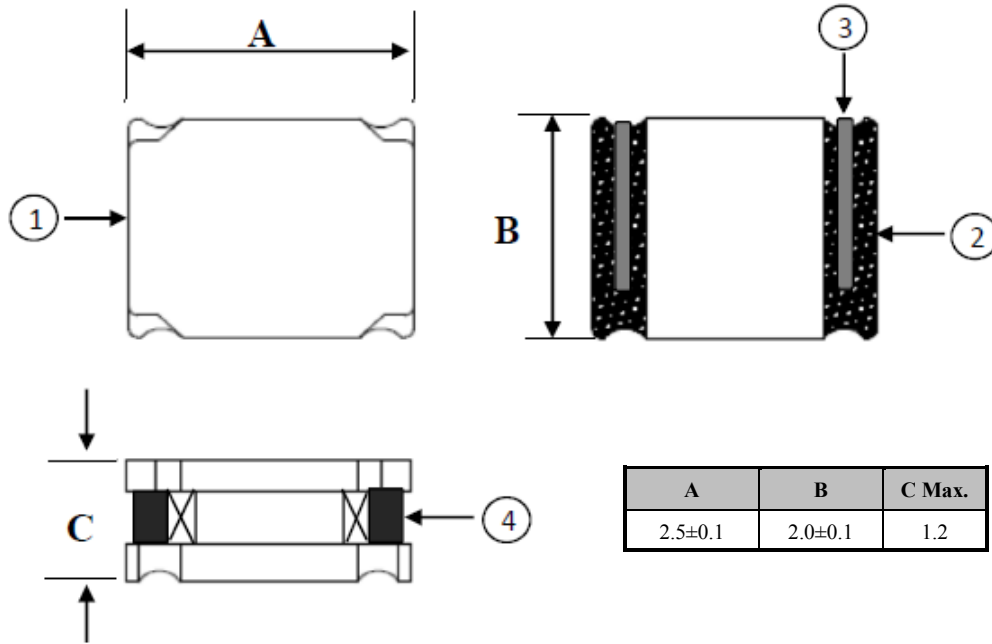
**RoHS**  
Compliant



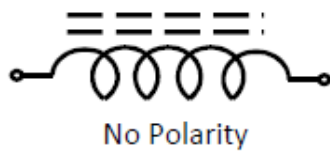
2.5 x 2.0 x 1.2mm

## OUTLINE DRAWING:

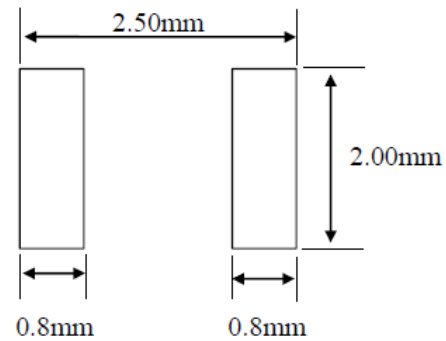
### Mechanical Dimensions



### 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

# Low Profile Shielded SMD Chip Power Inductor

ASPI-2512 series



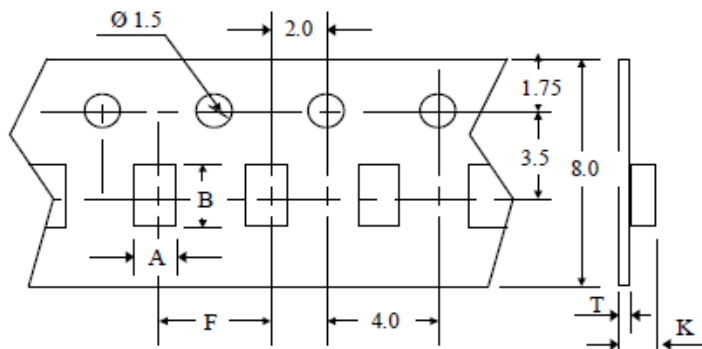
RoHS  
Compliant



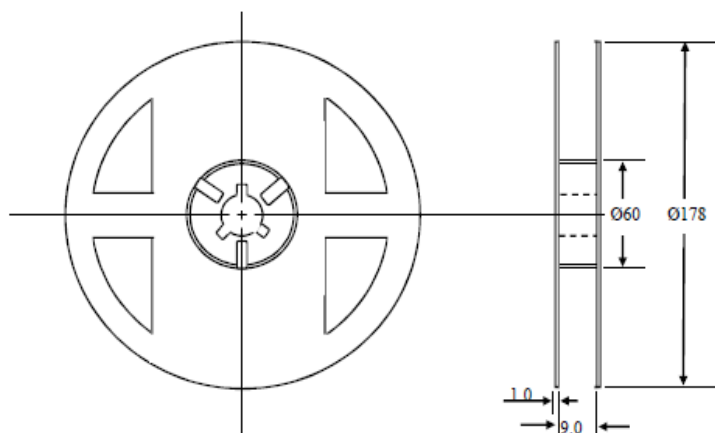
2.5 x 2.0 x 1.2mm

## TAPE & REEL:

T: 2,000pcs / reel

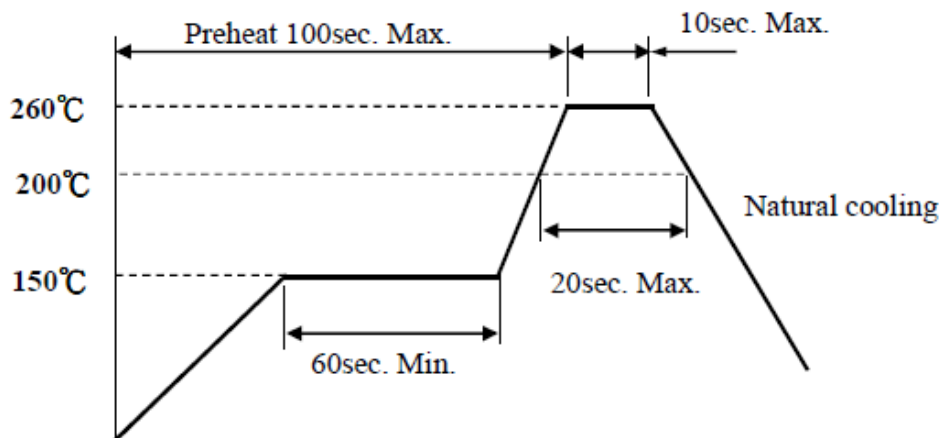


A	2.27
B	2.74
K	1.40
F	4
T	0.25



Dimension: mm

## REFLOW PROFILE:



**ATTENTION:** Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS  
ISO9001:2008  
CERTIFIED



**ABRACON**  
CORPORATION

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

Revised: 08.18.11