## Low Profile Shielded SMD Chip Power Inductor

ASPI-2515 series

MSL level: 1



**RoHS/RoHS II Compliant** 



2.5 x 2.0 x 1.5mm

#### > FEATURES:

- Small size and low profile: 1.5mm
- · 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:**

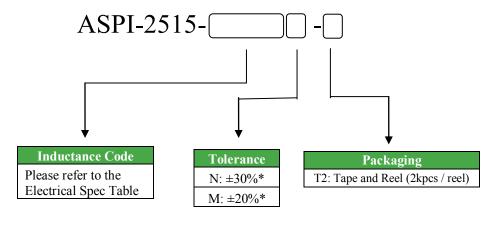
Abracon P/N:	ASPI-2515 Series
Operating Temperature & Humidity:	-25°C to +120°C (Including self generated heat)
Storage Temperature & Humidity:	-10°C to +40°C, 30% to 70% RH

Part Number ASPI-2515-Inductance Code	Inductance	Inductance Tolerance	DC Resistance		Saturation Current	Temperature Rise Current
Units	μН	%	${ m m}\Omega$	%	A	A
Symbol	L	M, N	DCR	Tolerance	Isat	Irms
ASPI-2515-R47	0.47	N	35	±30%	3.30	2.80
ASPI-2515-1R0	1.0	N	49	±30%	2.30	2.20
ASPI-2515-1R5	1.5	N	67	±30%	2.00	1.80
ASPI-2515-2R2	2.2	M	100	±20%	1.70	1.50
ASPI-2515-3R3	3.3	M	138	±20%	1.35	1.30
ASPI-2515-4R7	4.7	M	206	±20%	1.15	1.10
ASPI-2515-6R8	6.8	M	295	±20%	0.95	0.90
ASPI-2515-100	10.0	M	445	±20%	0.80	0.75

#### **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



\*N for L =  $0.47 \sim 1.5 \mu H$ 

\*M for L =  $2.2 \sim 10 \mu H$ 





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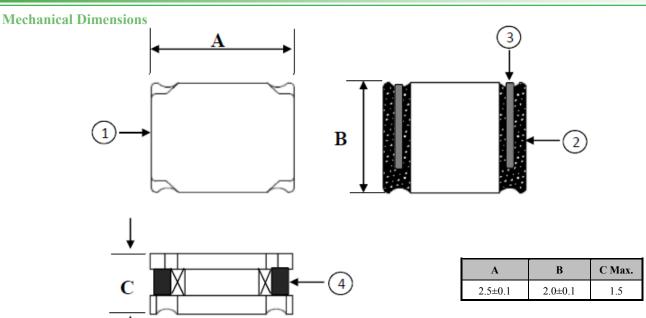
ASPI-2515 series



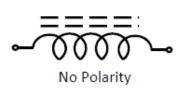


2.5 x 2.0 x 1.5mm

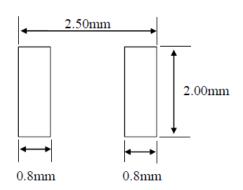
### **OUTLINE DRAWING:**



**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



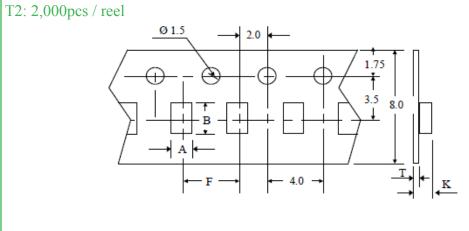
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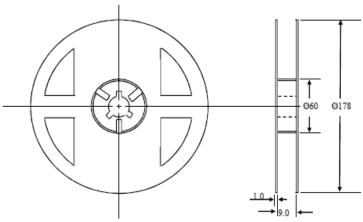




**► TAPE & REEL:** 

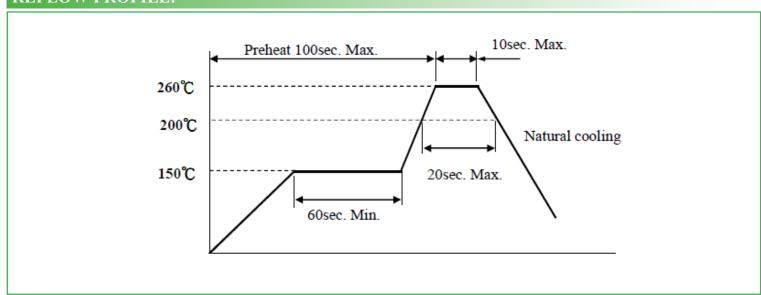


A	2.20
В	2.83
K	1.75
F	4
T	0.25



**Dimension: mm** 

### **REFLOW PROFILE:**



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