ULTRA LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR



3.0 x 3.0 x 1.0mm

ASPI-0310FS

Pb RoHS Compliant

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-0310FS 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	Inductance Tolerance	DCR	DCR Tolerance	Saturation Current	Temperature Rise Current
Units	µH	%	mΩ	%	A	A
Symbol	L	M, N	DCR		Isat	Irms
ASPI-0310FS-1R0	1.0	N	50	±25%	2.30	2.30
ASPI-0310FS-1R2	1.2	N	62	±30%	1.90	2.10
ASPI-0310FS-1R5	1.5	N	70		1.65	2.00
ASPI-0310FS-2R2	2.2	M	80	±20%	1.45	1.90
ASPI-0310FS-3R3	3.3	M	130		1.05	1.80
ASPI-0310FS-4R7	4.7	M	175		0.85	1.70
ASPI-0310FS-6R8	6.8	M	260		0.70	1.30
ASPI-0310FS-100	10.0	M	350		0.60	0.90
ASPI-0310FS-150	15.0	M	510		0.50	0.80
ASPI-0310FS-220	22.0	M	780		0.40	0.70
ASPI-0310FS-330	33.0	M	1100		0.32	0.50
ASPI-0310FS-470	47.0	M	1600		0.28	0.35

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 (Δ L/Lo : ≤ -30%)
4. Irms : Based on temperature rise (Δ T : 40°C TYP.)
5. Test Freq: 100KHz, 1Vrms

OPTIONS AND PART IDENTIFICATION

ASPI-3010FS-□□-□

Inductance Code	Tolerance	Packaging
Please refer to the Electrical Spec Table	N: ±30%* M: ±20%*	T2: Tape and Reel (2kpcs / reel)

*N for L = 1.0 ~ 1.5µH
*M for L = 2.2 ~ 47µH

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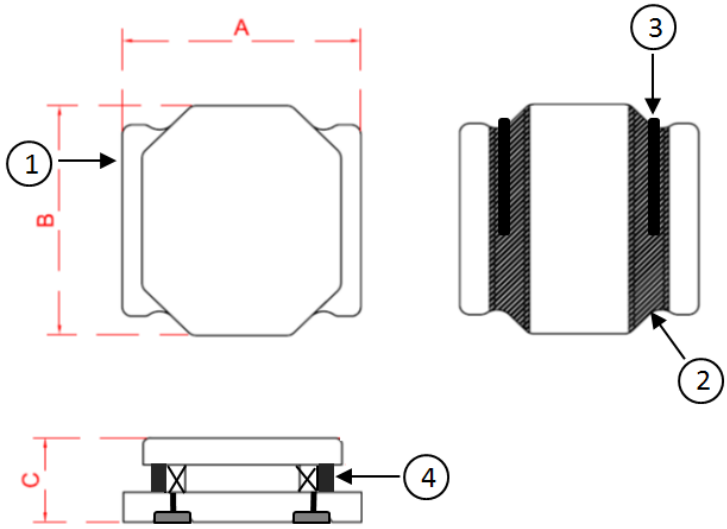
3.0 x 3.0 x 1.0mm

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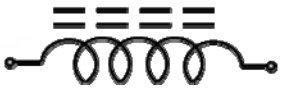
OUTLINE DRAWING:

Mechanical and Material Information 1 (Effective date: 11/10/2011)



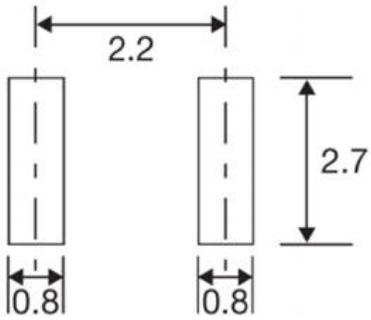
A	B	C Max.
3.0±0.1	3.0±0.1	1.0

Circuit Schematic



No Polarity

Recommended Land Pattern



Dimension: mm

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

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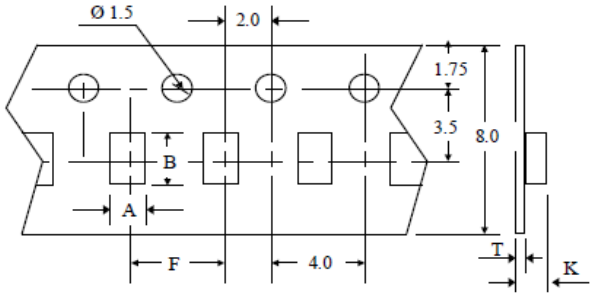
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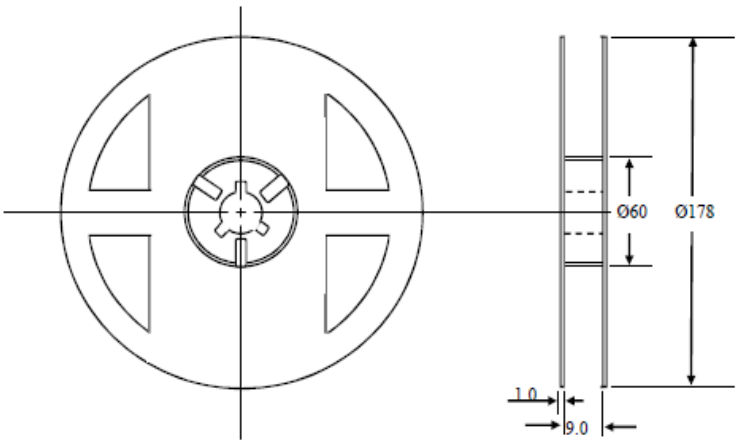
Pb RoHS Compliant

TAPE & REEL:

T2: 2,000pcs / reel

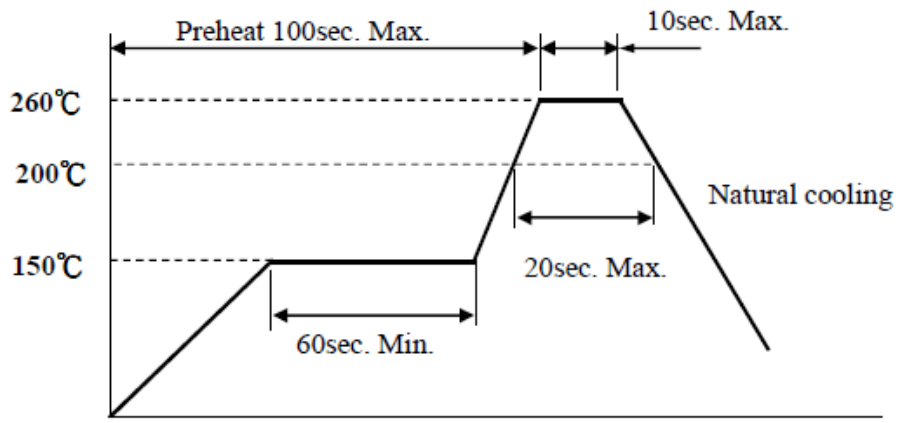


A	3.15
B	3.15
K	1.40
F	4
T	0.25



Dimension: mm

REFLOW PROFILE:



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