

ULTRA LOW PROFILE UNSHIELDED SMD CHIP POWER INDUCTOR

ASPI-0309



RoHS
Compliant



3.0 x 3.0 x 0.8mm

FEATURES:

- Ideal for design development
- Low DCR
- High reliability to mechanical stress
- Suitable for RoHS reflow profile

APPLICATIONS:

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

ELECTRICAL SPECIFICATIONS:

Abracon P/N:	ASPI-0309 Series
Operating Temperature & Humidity :	-30°C to +100°C, 5% to 85% RH. Please avoid moisture due to the humidity.
Storage Temperature & Humidity:	-20°C to +60°C, 5% to 85% RH. Please avoid moisture due to the humidity.

Part Number	Inductance	DCR	Saturation Current	Temperature Rise Current	Marking
Units	$\mu\text{H} \pm 20\%$	$\text{m}\Omega \pm 20\%$	A	A	-
Symbol	L	DCR	Isat*	Irms*	-
ASPI-0309-2R2M	2.2	170	0.98	1.00	E
ASPI-0309-3R3M	3.3	260	0.78	0.82	G
ASPI-0309-4R7M	4.7	340	0.65	0.72	H
ASPI-0309-100M	10	640	0.43	0.55	M
ASPI-0309-220M	22	1930	0.30	0.29	P
ASPI-0309-330M	33	2600	0.25	0.25	Q
ASPI-0309-470M	47	3300	0.21	0.22	R

*The rated current is subject to change depending upon the temperature cooling condition.

Test Conditions

Inductance: 100kHz, 0.3V, $T_a = 20^\circ\text{C}$

DCR: $T_a = 20^\circ\text{C}$

Isat: $\Delta L/L$ (initial) $\geq -30\%$

Irms: $\Delta T \leq 40^\circ\text{C}$

OPTIONS AND PART IDENTIFICATION

ASPI- 0309 - -

Inductance Code

Please refer to the table above

Packaging

T: Tape and Reel
(1kpcs / reel)

T4: Tape and Reel
(4kpcs / reel)



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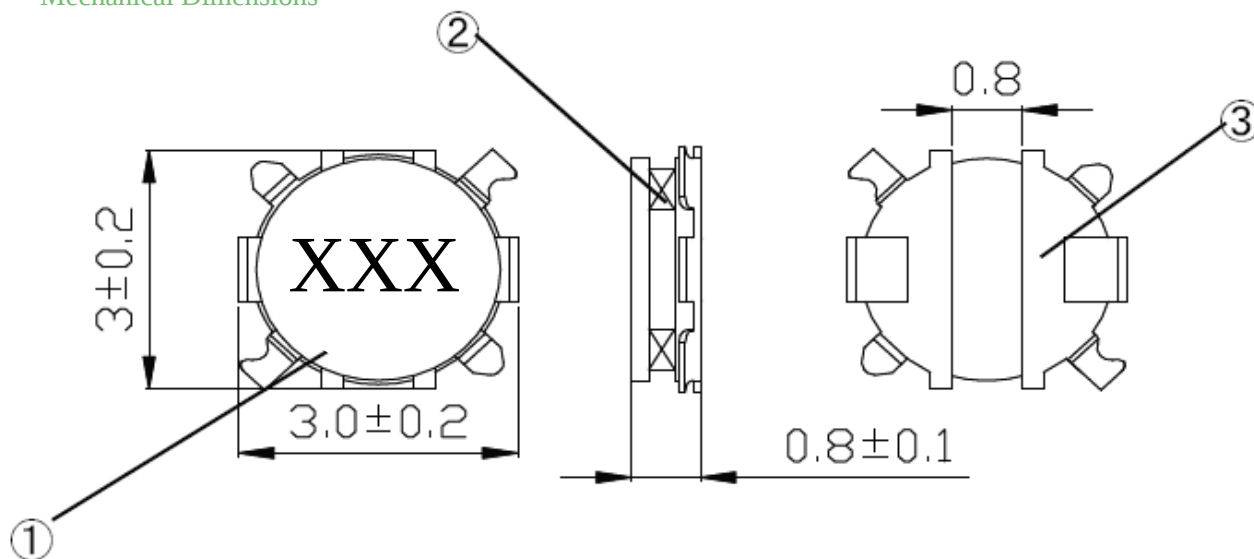
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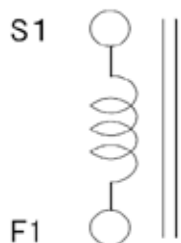
3.0 x 3.0 x 0.8mm

OUTLINE DRAWING:

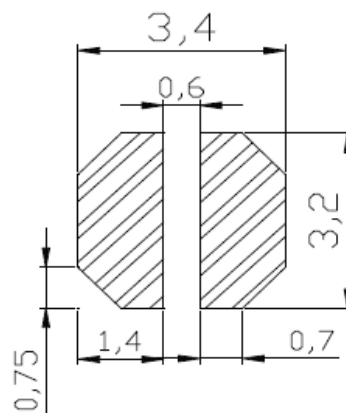
Mechanical Dimensions



Circuit Schematic



Recommended Land Pattern



No	Part Name	Material
1	Drum core	Ni-Zn Ferrite
2	Coil	Cu/Class H Polyurethane Enameled
3	Terminals/Solder	Copper Alloy/Pb free solder +

Dimension: mm

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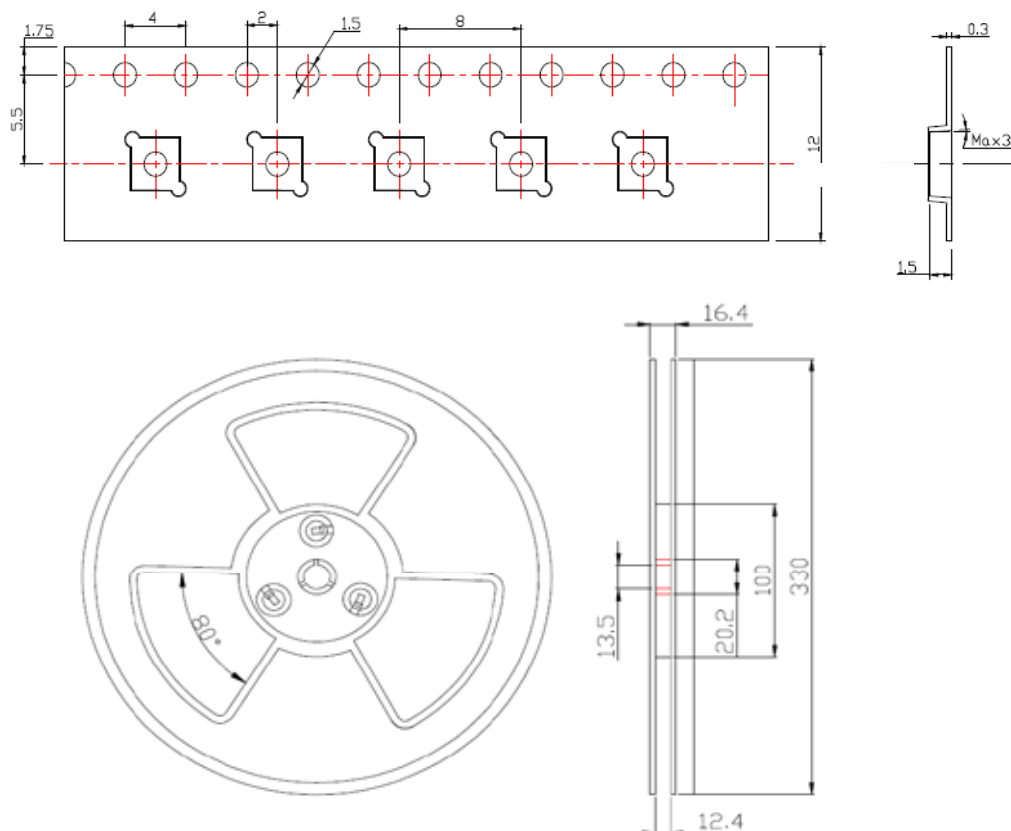
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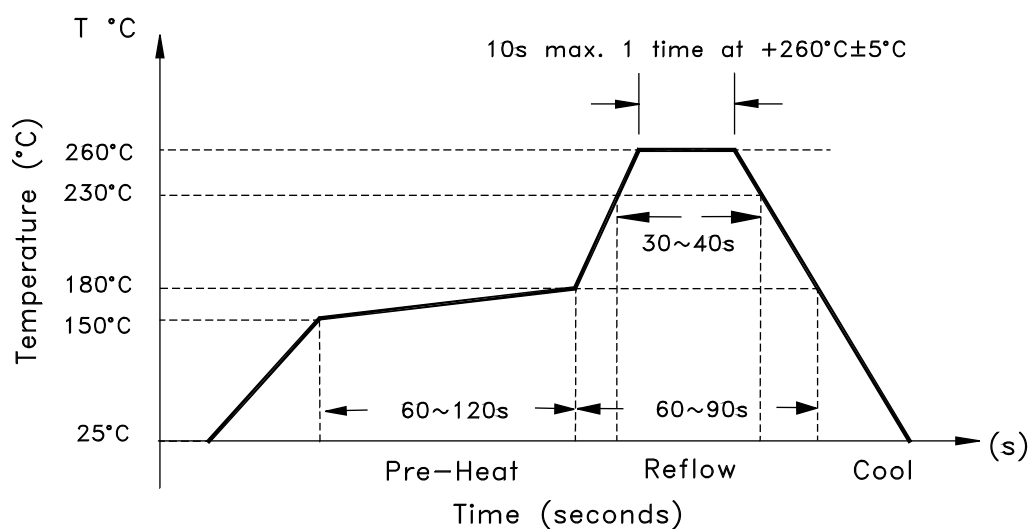
TAPE & REEL:

T: 1,000pcs / reel
T4: 4,000pcs / reel



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
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