



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# ULTRA LOW PROFILE UNSHIELDED SMD CHIP POWER INDUCTOR



3.0 x 3.0 x 0.8mm

ASPI-0309



RoHS  
Compliant

## 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, Ta=20°C  
 DCR: Ta=20°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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3.0 x 3.0 x 0.8mm

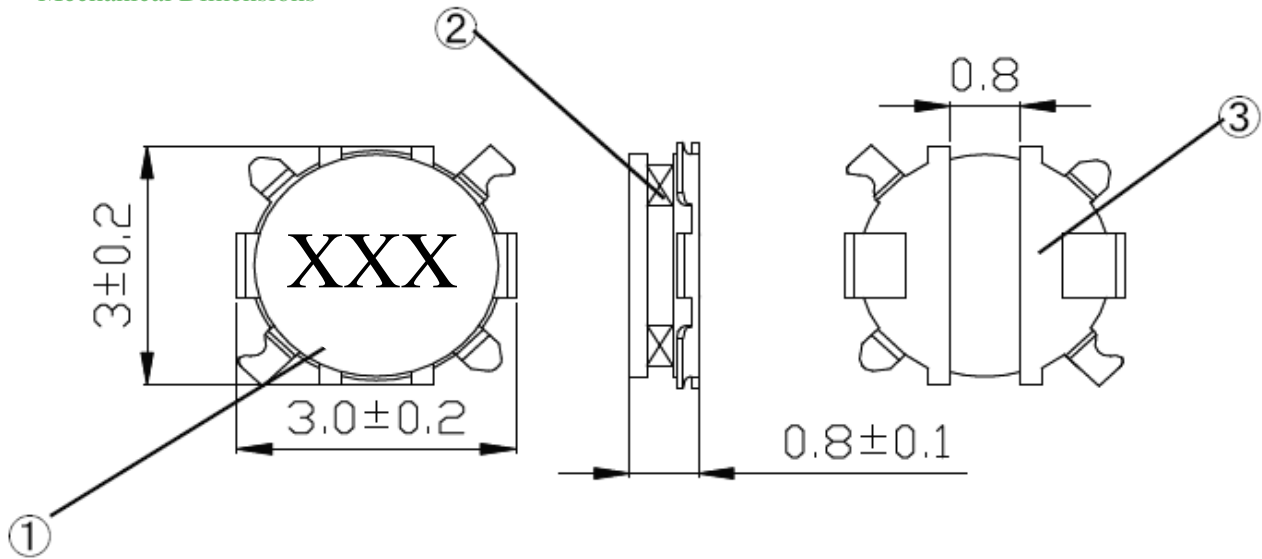
ASPI-0309



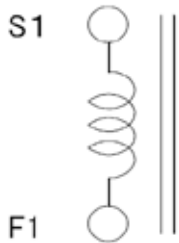
**RoHS**  
Compliant

## OUTLINE DRAWING:

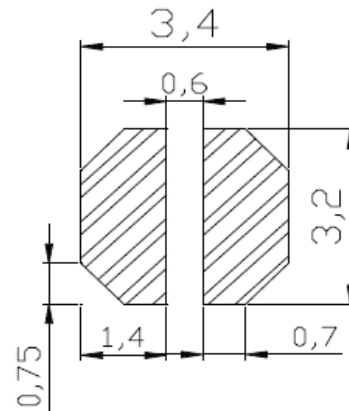
Mechanical Dimensions



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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3.0 x 3.0 x 0.8mm

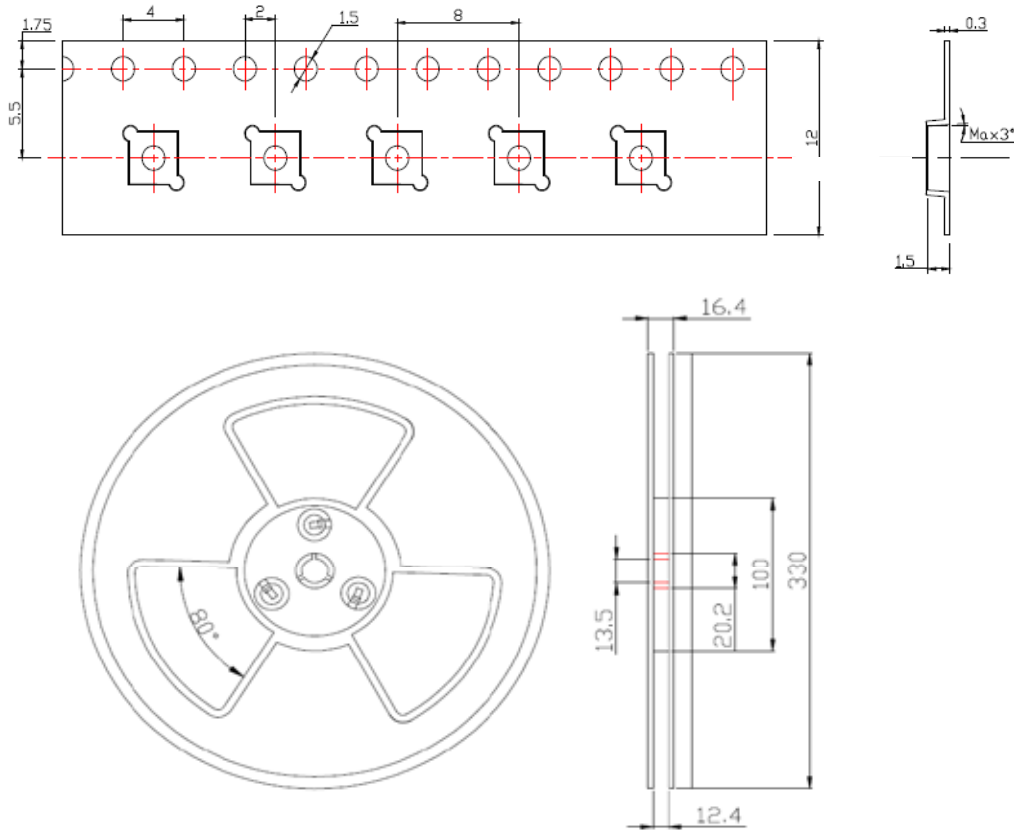
ASPI-0309



RoHS  
Compliant

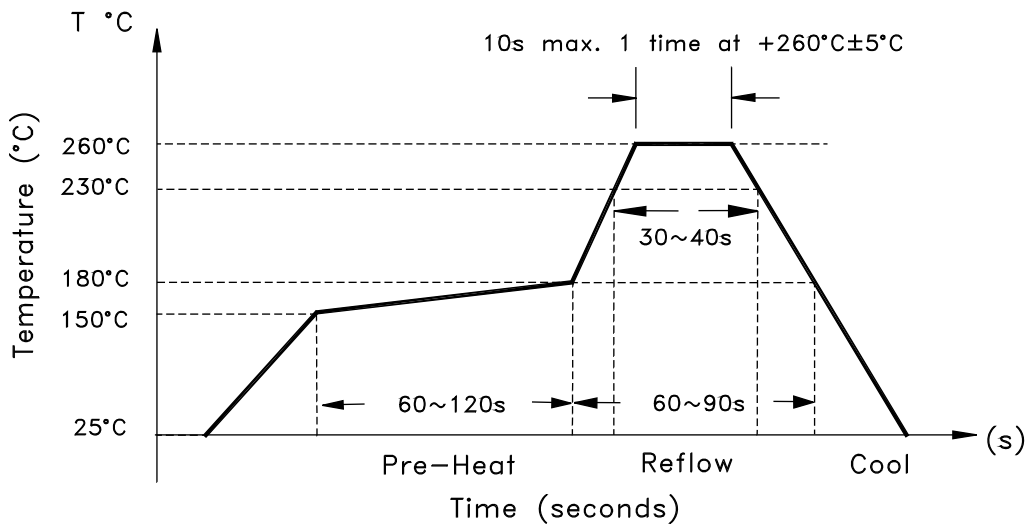
## TAPE & REEL:

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



Dimension: mm

## REFLOW PROFILE:



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30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)