

# LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR



6.0 x 6.0 x 1.2mm

ASPI-0612FS



**RoHS**  
Compliant

## FEATURES:

- Small size and low profile: 1.2mm
- Small DCR and high rated current
- High reliability to mechanical strength
- Magnetically shielded by magnetic powder molding
- Suitable for RoHS reflow profile

## APPLICATIONS:

- DC/DC converter for LCD display of notebook PC
- Portable communication equipment
- Digital cameras

## ELECTRICAL SPECIFICATIONS:

Abracon P/N:	ASPI-0612FS 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	$I_{\text{sat}}^*$	$I_{\text{rms}}^*$	—
ASPI-0612FS-2R2M	2.2	65	2.40	1.80	2R2
ASPI-0612FS-3R3M	3.3	75	2.00	1.65	3R3
ASPI-0612FS-4R7M	4.7	110	1.70	1.40	4R7
ASPI-0612FS-6R8M	6.8	160	1.40	1.20	6R8
ASPI-0612FS-100M	10	220	1.20	1.05	100
ASPI-0612FS-150M	15	300	1.00	0.90	150
ASPI-0612FS-220M	22	460	0.80	0.72	220
ASPI-0612FS-330M	33	640	0.67	0.62	330
ASPI-0612FS-470M	47	970	0.56	0.50	470

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

$I_{\text{sat}}$ :  $\Delta L/L$  (initial)  $\geq -30\%$

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

## OPTIONS AND PART IDENTIFICATION

ASPI-0612FS-  -

### Inductance Code

Please refer to the table above

### Packaging

T: Tape and Reel  
(1kpcs / reel)  
T2: Tape and Reel  
(2.5kpcs / reel)



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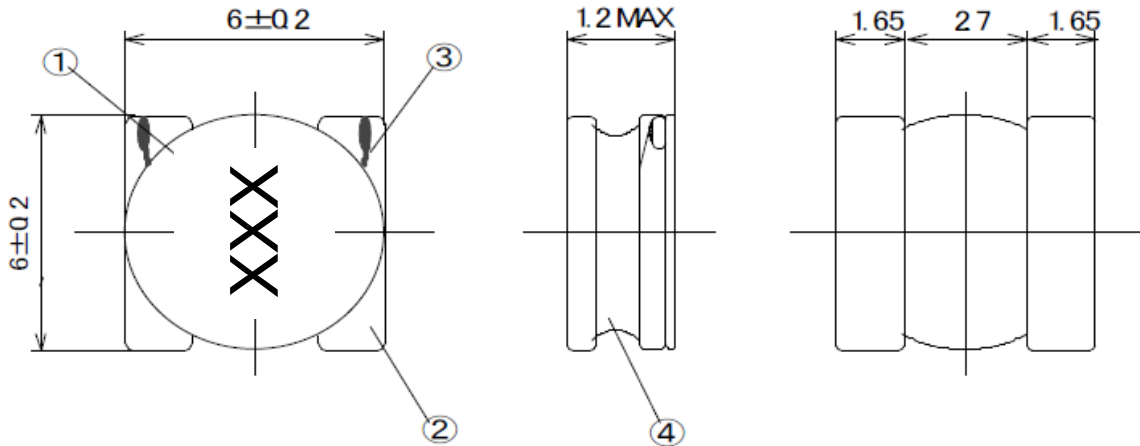
**RoHS**  
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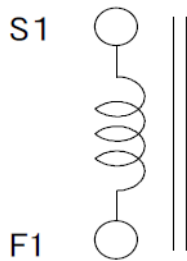
6.0 x 6.0 x 1.2mm

## OUTLINE DRAWING:

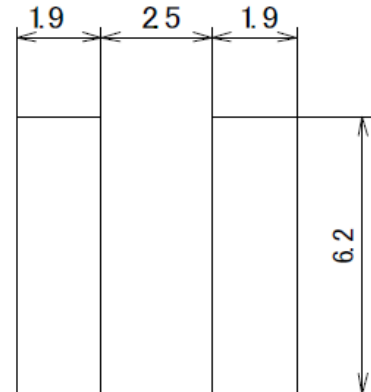
### Mechanical Dimensions



### Circuit Schematic



### Recommended Land Pattern



No	Part Name	Material
1	Drum core	Ni-Zn Ferrite
2	Terminals	Copper alloy, Sn
3	Coil	Cu/UEW
4	Adhesive	Epoxy base resin
	Magnetic powder	Ni-Zn Ferrite

Dimension: mm

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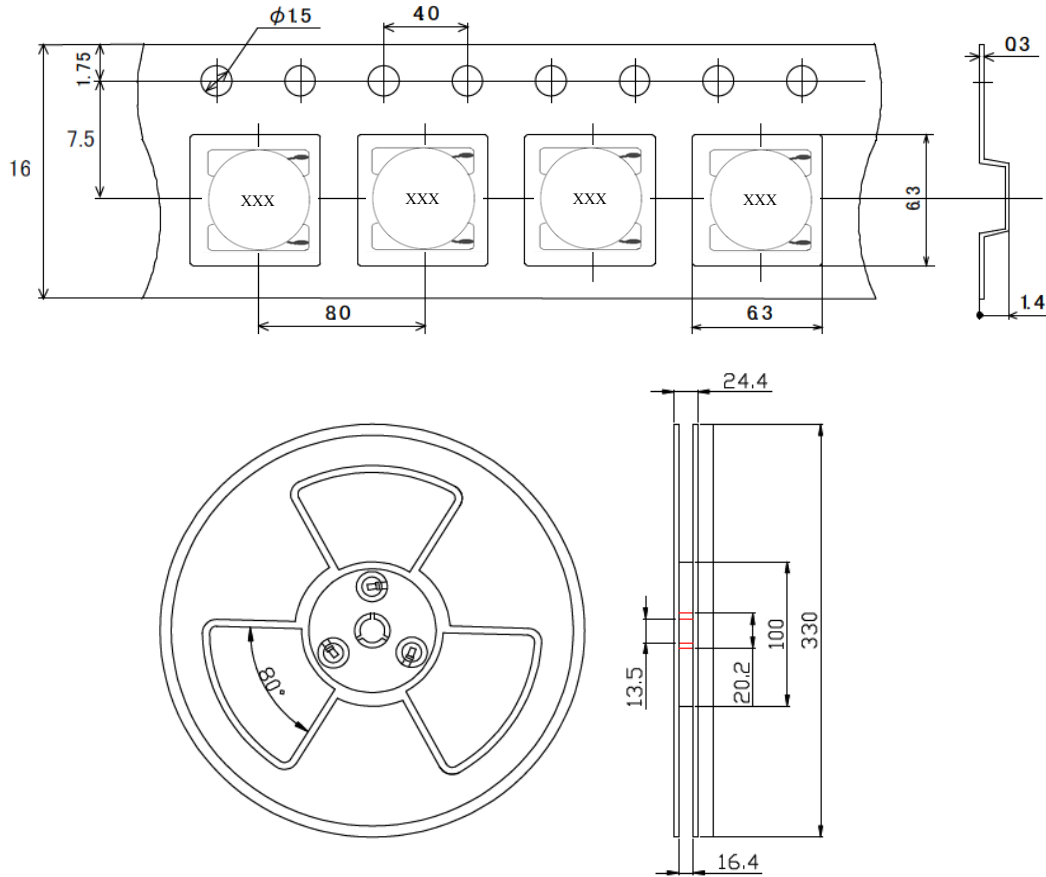
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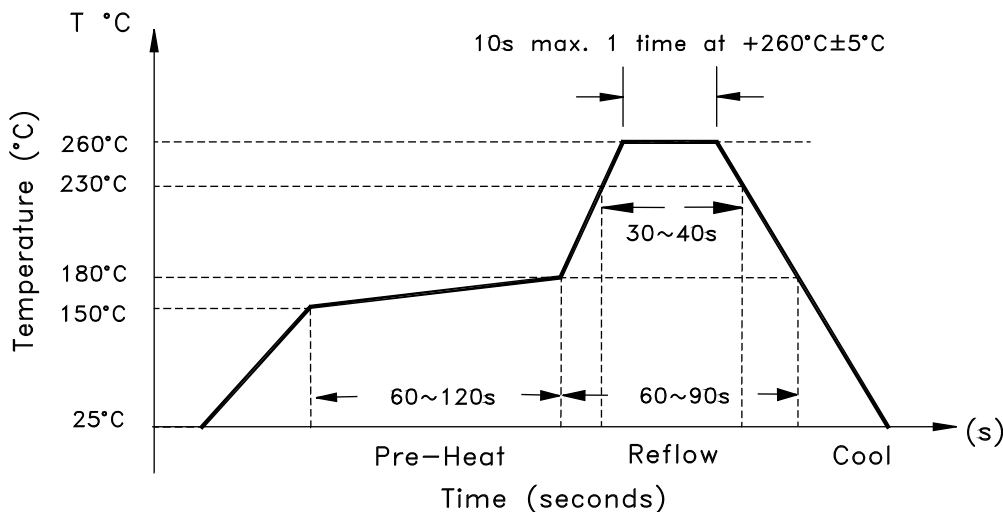
## TAPE & REEL:

T: 1,000pcs / reel  
T2: 2,500pcs / reel



Dimension: mm

## REFLOW PROFILE:



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ABRACON IS  
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CERTIFIED



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