

# LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR



6.0 x 6.0 x 2.8mm

ASPI-0628



**RoHS**  
Compliant

## FEATURES:

- Small size and low profile: 2.8mm
- 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.

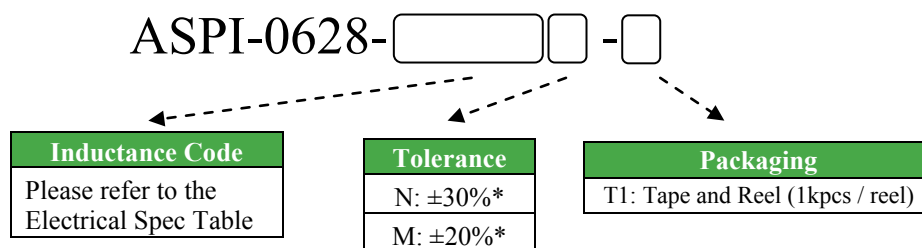
## ELECTRICAL SPECIFICATIONS:

Abracon P/N:	ASPI-0628 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-6028-0R9	0.9	N	13	±30%	6.70	4.60
ASPI-6028-1R5	1.5	N	16		5.10	4.20
ASPI-6028-2R2	2.2	N	20		4.20	3.70
ASPI-6028-3R0	3.0	N	23		3.60	3.40
ASPI-6028-3R3	3.3	M	28		3.60	3.40
ASPI-6028-3R9	3.9	M	31	±20%	2.70	3.00
ASPI-6028-4R7	4.7	M	31		2.70	3.00
ASPI-6028-6R0	6.0	M	40		2.50	2.50
ASPI-6028-6R2	6.2	M	52		2.20	2.20
ASPI-6028-6R8	6.8	M	52		2.20	2.20
ASPI-6028-100	10	M	65		1.90	1.90
ASPI-6028-150	15	M	95		1.60	1.80
ASPI-6028-220	22	M	135		1.30	1.40
ASPI-6028-330	33	M	220		1.10	1.10
ASPI-6028-470	47	M	300		1.00	0.92
ASPI-6028-680	68	M	420	0.80	0.77	
ASPI-6028-101	100	M	600	0.65	0.66	

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 ( $\Delta L/L_0 : \leq -30\%$ )
4. Irms : Based on temperature rise ( $\Delta T : 40^\circ\text{C TYP.}$  )
5. Test Freq: 100KHz, 1Vrms

## OPTIONS AND PART IDENTIFICATION



\*N for L = 0.9 ~ 3.0μH  
\*M for L = 4.7 ~ 100μH



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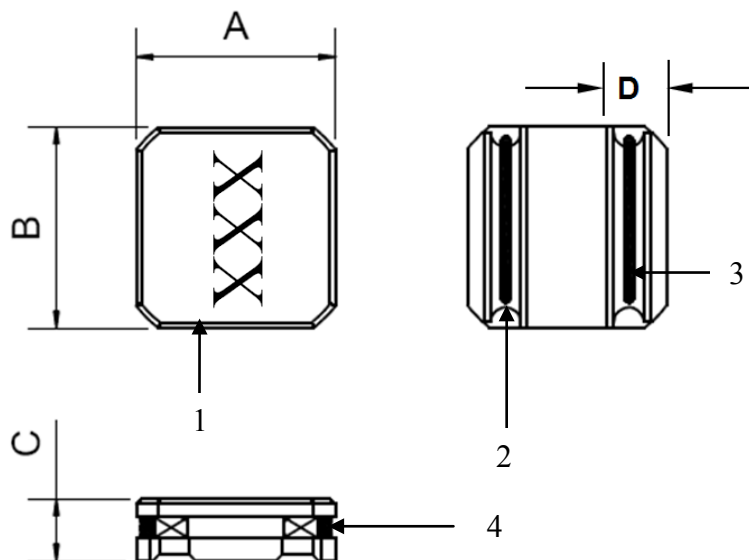
6.0 x 6.0 x 2.8mm

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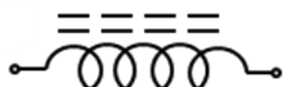
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## OUTLINE DRAWING:



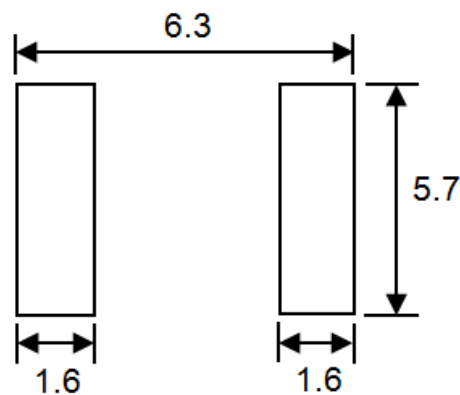
A	B	C Max.	D Typ.
6.0±0.2	6.0±0.2	2.8	1.50

### Circuit Schematic



No Polarity

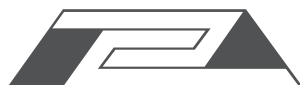
### Recommended Land Pattern



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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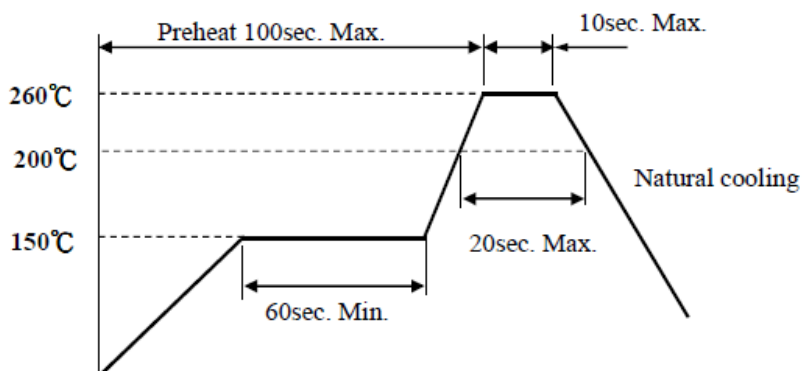
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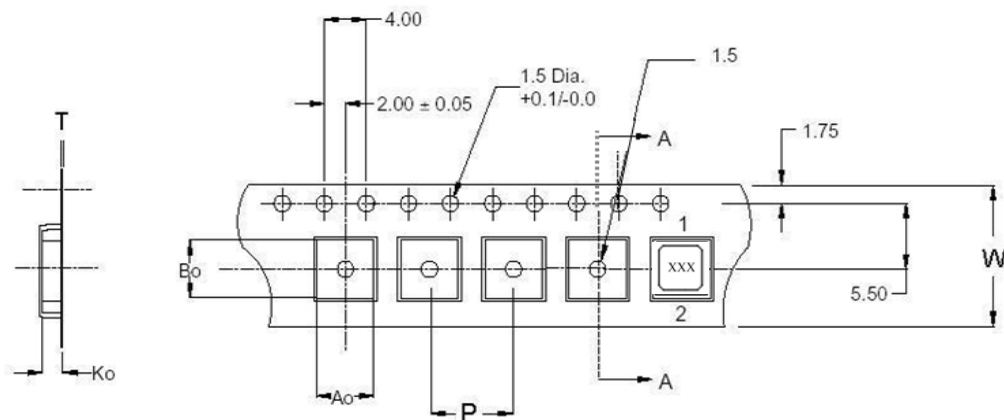


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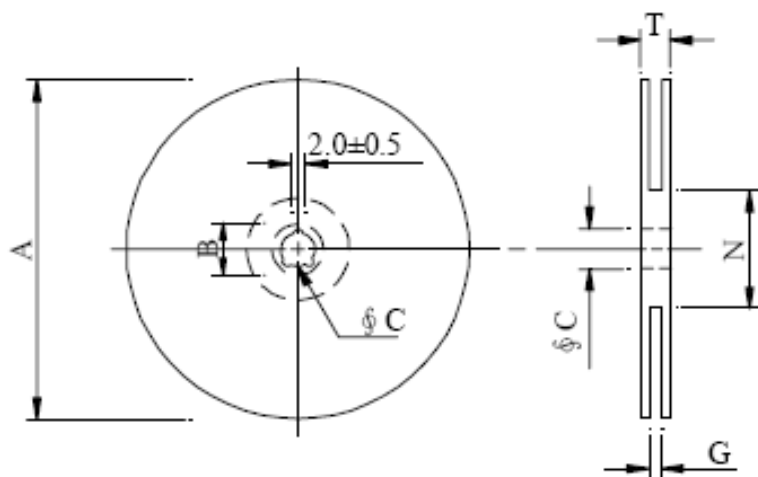
## REFLOW PROFILE:



## TAPE & REEL: T1: 1,000pcs / reel



Ao	6.40
Bo	6.40
Ko	3.05
W	16.00
P	12.00
T	0.40



A	330
B	21.0±0.8
C	13.5±0.5
G	16.6
N	99.5
T	21

Dimension: mm

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