

# ULTRA MINIATURE SHIELDED POWER INDUCTOR

ASPI-0320S



**RoHS**  
Compliant



3.2 x 3.2 x 2.0mm

## FEATURES:

- Small size and low profile: 2.0mm
- 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:

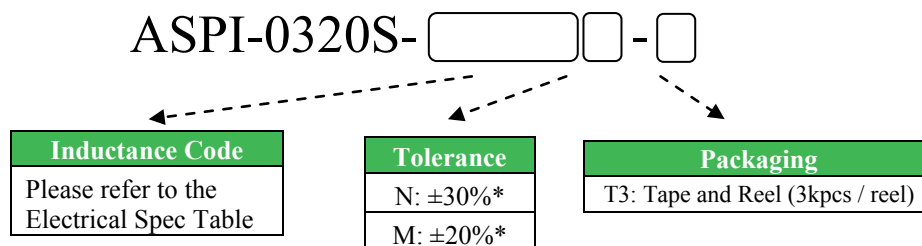
Abracon P/N:	ASPI-0320S
Operating Temperature & Humidity :	-25°C to +100°C (Including self generated heat)
Storage Temperature & Humidity:	-10°C to +40°C, 30% to 70% RH

Part Number	Inductance	Tolerance	DCR Max	DCR Typ	Saturation Current	Temperature Rise Current
Units	μH	%	mΩ	mΩ	A	A
Symbol	L	M, N			Isat*	Irms*
ASPI-0320S-1R5	1.5	N	95	76	1.40	1.45
ASPI-0320S-2R2	2.2	N	106	84	1.30	1.33
ASPI-0320S-3R3	3.3	N	125	100	1.10	1.24
ASPI-0320S-4R7	4.7	N	157	126	0.95	1.10
ASPI-0320S-5R6	5.6	N	180	144	0.88	1.00
ASPI-0320S-6R8	6.8	N	193	154	0.85	0.94
ASPI-0320S-100	10	M	241	193	0.70	0.77
ASPI-0320S-120	12	M	322	258	0.63	0.68
ASPI-0320S-150	15	M	344	275	0.56	0.66
ASPI-0320S-220	22	M	495	396	0.48	0.57
ASPI-0320S-330	33	M	740	592	0.38	0.45
ASPI-0320S-470	47	M	1157	926	0.32	0.36

### Test Conditions

1. Inductance is measured in HP-4285A Precision LCR Meter.
2. RDC is measured in HP-4338B milli ohm meter.(or equivalent).
3. Isat : Based on inductance change ( $\Delta L/L_0 : \leq -35\%$ )
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 = 1.5~6.8μH

\*M for L = 10 ~ 47μH



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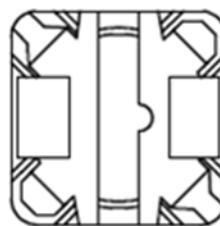
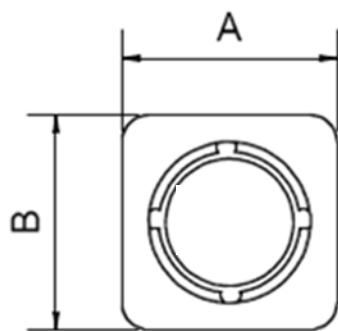
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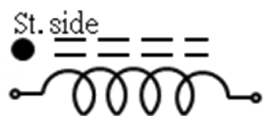
## OUTLINE DRAWING:

### Mechanical Dimensions

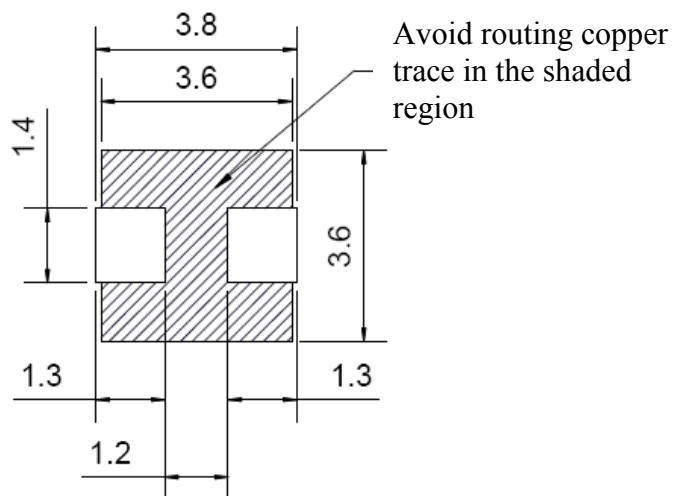


A	B	C Max.
3.2±0.1	3.2±0.1	2.0

### Circuit Schematic



### Recommended Land Pattern



Dimension: mm

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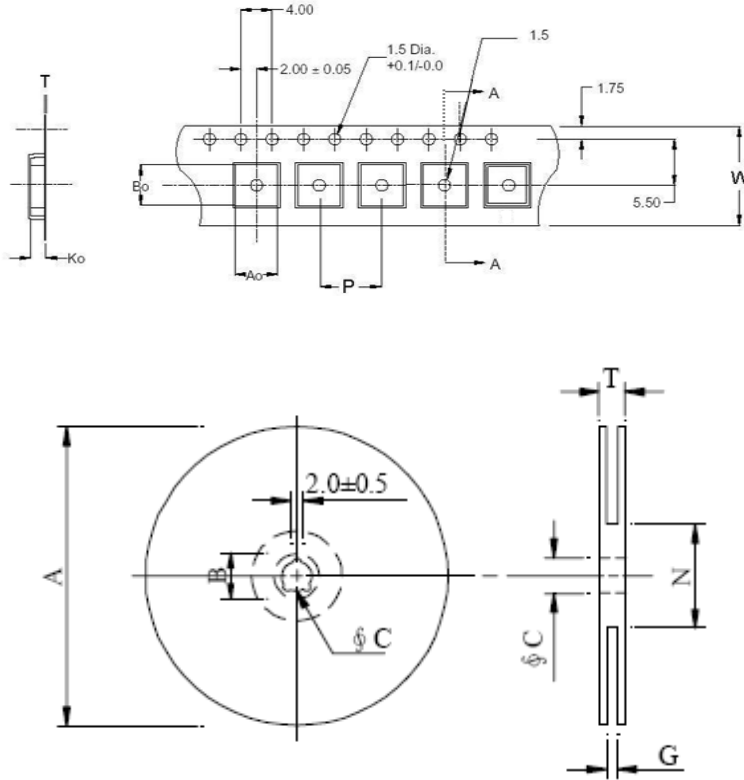
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3.2 x 3.2 x 2.0mm

## TAPE & REEL:

T3: 3,000pcs / reel

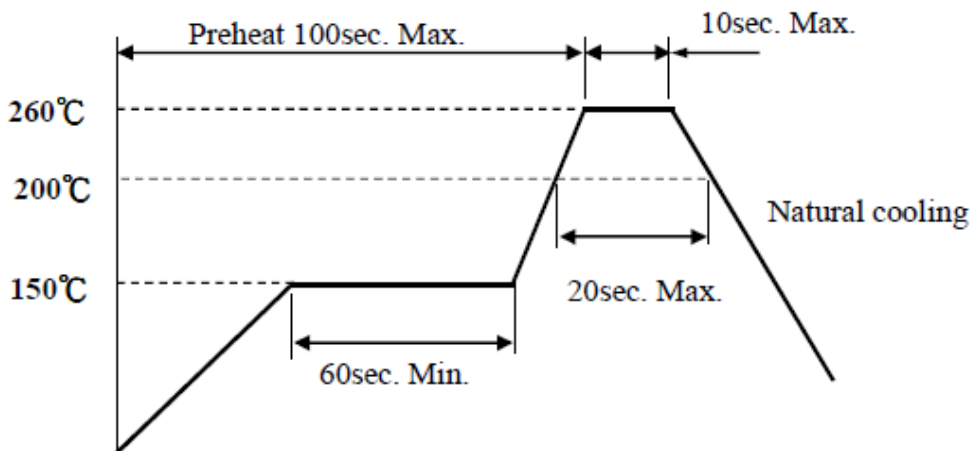


Ao	3.6
Bo	3.3
Ko	1.35
W	12
P	8
T	0.3

A	330
B	21.0±0.8
C	13.5±0.5
G	12.6
N	99.5
T	17.2

Dimension: mm

## REFLOW PROFILE:



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