

ULTRA MINIATURE SHIELDED POWER INDUCTOR

ASPI-0312S

MSL level: 2 (This product is packed with dry packaging)



RoHS
Compliant



3.2 x 3.2 x 1.2mm

FEATURES:

- Small size and low profile: 1.2mm
- 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:

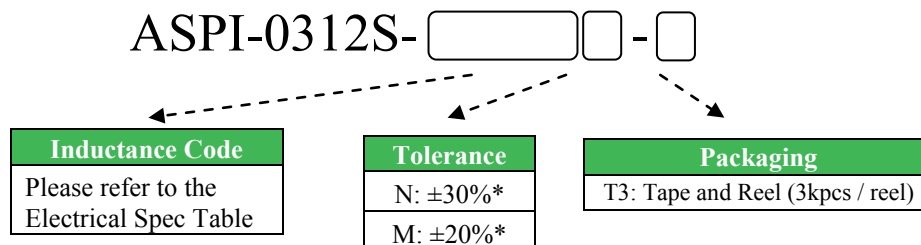
Abracon P/N:	ASPI-0312S
Operating Temperature & Humidity :	-25°C to +100°C (Including self generated heat)
Storage Temperature & Humidity:	-10°C to +40°C, 30% to 70% RH

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-0312S-1R2	1.2	N	78	63	1.40	1.40
ASPI-0312S-1R5	1.5	N	90	72	1.20	1.32
ASPI-0312S-2R2	2.2	N	128	103	0.95	1.00
ASPI-0312S-3R3	3.3	N	200	161	0.83	0.85
ASPI-0312S-3R9	3.9	N	250	200	0.80	0.81
ASPI-0312S-4R7	4.7	N	267	214	0.65	0.80
ASPI-0312S-5R6	5.6	N	290	232	0.60	0.77
ASPI-0312S-6R8	6.8	N	408	327	0.50	0.65
ASPI-0312S-8R2	8.2	N	425	340	0.48	0.62
ASPI-0312S-100	10	M	490	392	0.45	0.57
ASPI-0312S-150	15	M	896	717	0.35	0.43
ASPI-0312S-220	22	M	1187	950	0.30	0.33

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 = 1.2~8.2μH

*M for L = 10 ~ 22μH

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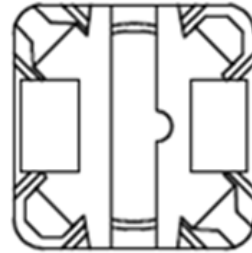
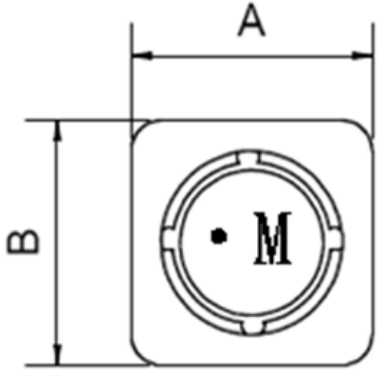
RoHS
Compliant



3.2 x 3.2 x 1.2mm

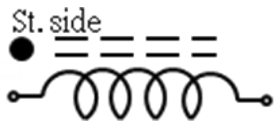
OUTLINE DRAWING:

Mechanical Dimensions

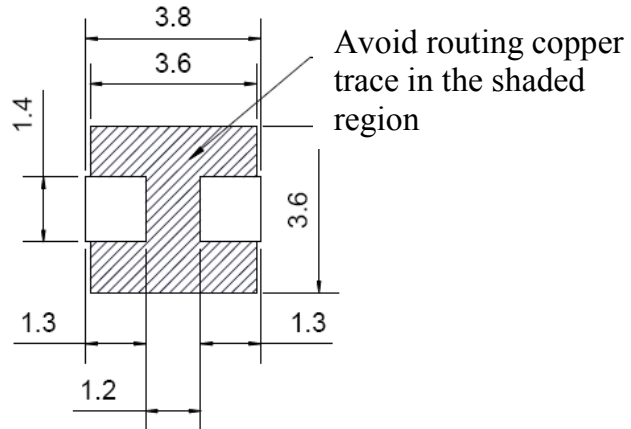


A	B	C Max.
3.2±0.1	3.2±0.1	1.2

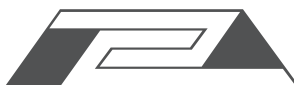
Circuit Schematic



Recommended Land Pattern



Dimension: mm



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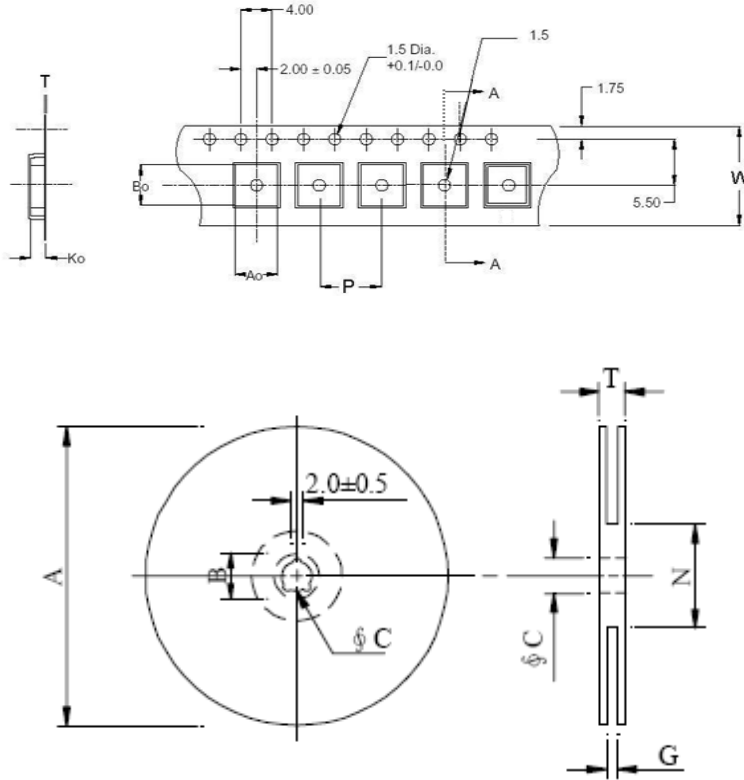
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3.2 x 3.2 x 1.2mm

TAPE & REEL:

T3: 3,000pcs / reel

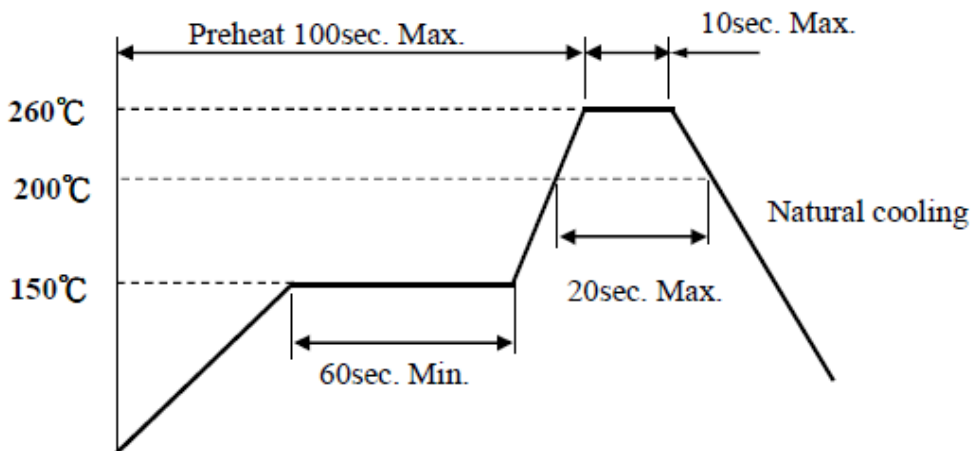


Ao	3.6
Bo	3.3
Ko	1.35
W	12
P	8
T	0.3

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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