

ULTRA MINIATURE SHIELDED POWER INDUCTOR

ASPI-0418S



RoHS
Compliant



4.2 x 4.2 x 1.8mm

FEATURES:

- Small size and low profile: 1.8mm
- 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:

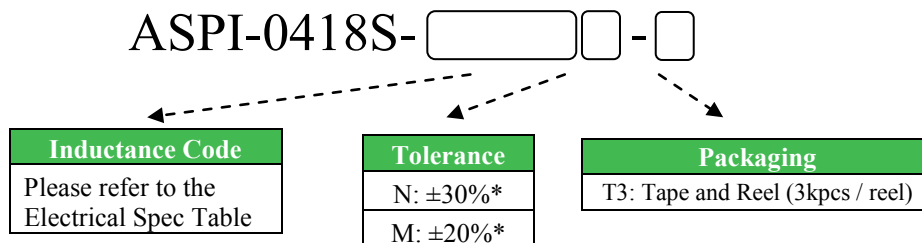
Abracon P/N:	ASPI-0418S
Operating Temperature & Humidity :	-25°C to +100°C (Including self generated heat)
Storage Temperature & Humidity:	-10°C to +40°C, 30% to 70% RH

Part Number	Inductance	Tolerance	DCR Max	DCR Typ	Saturation Current	Temperature Rise Current
Units	μH	%	$\text{m}\Omega$	$\text{m}\Omega$	A	A
Symbol	L	M, N			Isat*	Irms*
ASPI-0418S-1R2	1.2	N	63	51	2.00	1.90
ASPI-0418S-1R5	1.5	N	69	56	1.80	1.90
ASPI-0418S-2R2	2.2	N	80	64	1.60	1.75
ASPI-0418S-3R3	3.3	N	100	80	1.40	1.41
ASPI-0418S-3R9	3.9	N	111	89	1.30	1.37
ASPI-0418S-4R7	4.7	N	119	95	1.20	1.33
ASPI-0418S-5R6	5.6	N	132	106	1.10	1.25
ASPI-0418S-6R8	6.8	N	155	124	1.00	1.13
ASPI-0418S-8R2	8.2	N	163	130	0.90	1.10
ASPI-0418S-100	10	M	176	140	0.85	1.00
ASPI-0418S-120	12	M	245	196	0.74	0.91
ASPI-0418S-150	15	M	276	221	0.70	0.85
ASPI-0418S-180	18	M	306	245	0.65	0.80
ASPI-0418S-220	22	M	433	346	0.55	0.72
ASPI-0418S-270	27	M	477	382	0.50	0.67
ASPI-0418S-330	33	M	524	419	0.45	0.61

Test Conditions

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 ($\Delta L/L_0 : \leq -35\%$)
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 = 1.2~8.2 μH

*M for L = 10 ~ 33 μH



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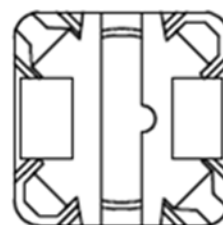
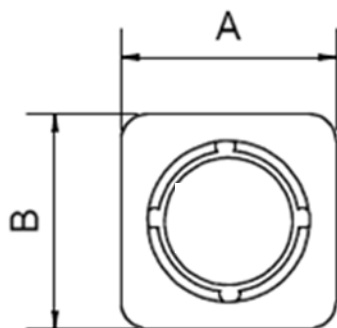
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OUTLINE DRAWING:

Mechanical Dimensions

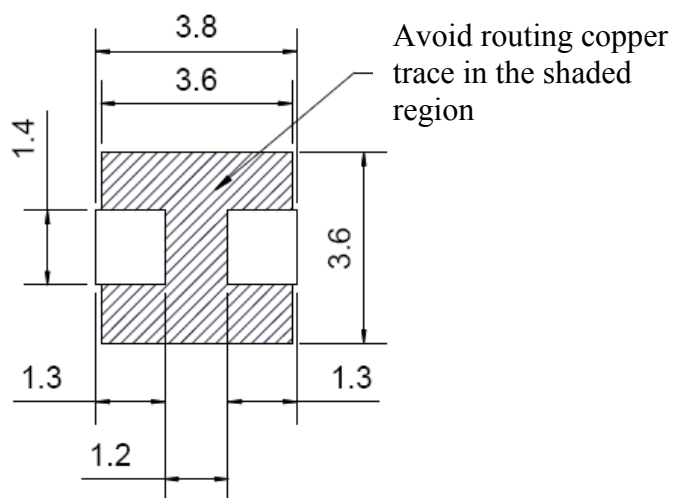


A	B	C Max.
4.2±0.1	4.2±0.1	1.8

Circuit Schematic



Recommended Land Pattern



Dimension: mm



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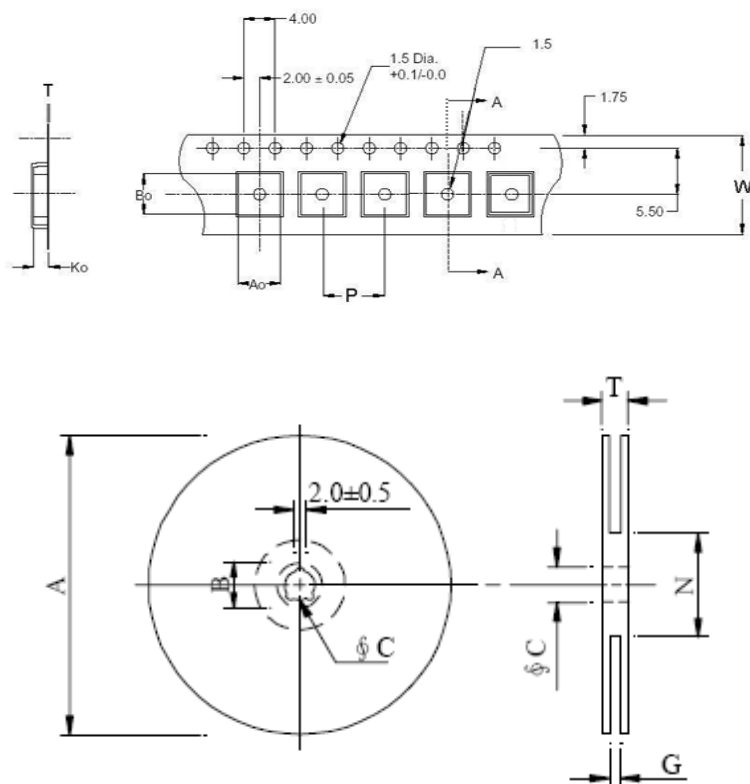
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TAPE & REEL:

T3: 3,000pcs / reel

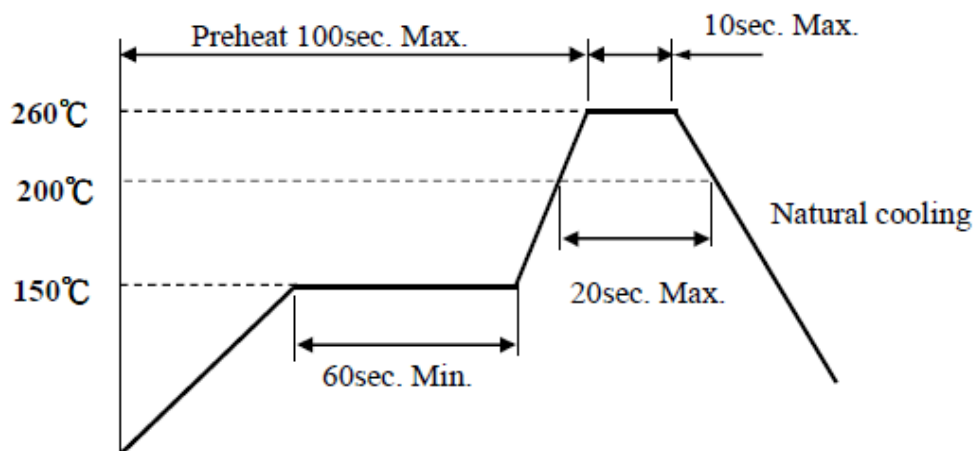


Ao	4.6
Bo	4.3
Ko	1.95
W	12
P	8
T	0.3

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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Revised: 11.11.11