SMD SHIELDED POWER INDUCTOR

ASPI - 0315S



3.8 x 3.8 x 1.8mm

Pb RoHS Compliant

FEATURES:

- Compact size and very thin: 3.8X3.8X1.8mm
- Magnetically shielded, surface mount inductor
- Large DC current & low DC resistance
- Mighty temperature deflection prevents damage during solder reflow

APPLICATIONS:

- PDA's flash memory
- Step-up, step-down converters
- Communication systems, XDSL, PBX base stations
- Power source circuits, DC/DC converters, DC/AC inverters
- Hard disk, notebook computer

ELECTRICAL SPECIFICATIONS:

Abracon Part Number:	ASPI-0315S-xxx
Operating Temperature:	-40ºC to +125º C (including self-generated heat)
Storage Temperature:	-40ºC to +125º C

Part Number	L (µH)	Tolerance	R_{DC} (Ω)	I_{DC} (A)
		±20%, ±30%	Max	Max
ASPI-0315S-1R0	1.0	N	0.046	1.47
ASPI-0315S-1R5	1.5	N	0.052	1.45
ASPI-0315S-2R2	2.2	N	0.072	1.20
ASPI-0315S-2R7	2.7	N	0.075	1.18
ASPI-0315S-3R3	3.3	N	0.085	1.10
ASPI-0315S-3R9	3.9	N	0.095	1.00
ASPI-0315S-4R7	4.7	N	0.105	0.900
ASPI-0315S-5R6	5.6	N	0.119	0.822
ASPI-0315S-6R8	6.8	N	0.170	0.730
ASPI-0315S-8R2	8.2	N	0.190	0.621
ASPI-0315S-100	10	M	0.210	0.550
ASPI-0315S-120	12	M	0.247	0.500
ASPI-0315S-150	15	M	0.295	0.450
ASPI-0315S-180	18	M	0.416	0.410
ASPI-0315S-220	22	M	0.430	0.400
ASPI-0315S-270	27	M	0.546	0.370
ASPI-0315S-330	33	M	0.675	0.320
ASPI-0315S-390	39	M	0.871	0.278
ASPI-0315S-470	47	M	0.962	0.260
ASPI-0315S-560	56	M	1.09	0.242
ASPI-0315S-680	68	M	1.25	0.219
ASPI-0315S-820	82	M	1.50	0.200
ASPI-0315S-101	100	M	1.68	0.187
ASPI-0315S-121	120	M	2.15	0.178
ASPI-0315S-151	150	M	2.60	0.150
ASPI-0315S-181	180	M	2.86	0.138
ASPI-0315S-221	220	M	4.55	0.122
ASPI-0315S-271	270	M	5.07	0.105
ASPI-0315S-331	330	M	5.89	0.098
ASPI-0315S-391	390	M	6.50	0.096
ASPI-0315S-471	470	M	7.15	0.081
ASPI-0315S-561	560	M	9.75	0.070
ASPI-0315S-681	680	M	12.74	0.069

Testing Condition:

Inductance: 100KHz, 0.25V, 0 Adc
Humidity Range: 65% RH
Temperature Rise Current: Current measured when ΔT of 40°C
Saturation Current: Current measured when ΔL of 30%
1) Test L: Agilent 4284A Precision LCR meter.
2) Test DCR：Mili-ohm meter
3) Test IDC：Agilent 4284A Precision LCR meter with HP42841A current source.

ABRACON

5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
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REVISED: 09-30-20

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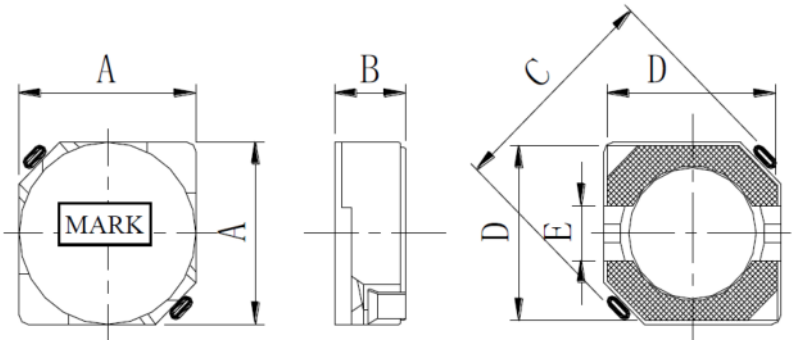
RoHS Compliant

PART IDENTIFICATION:

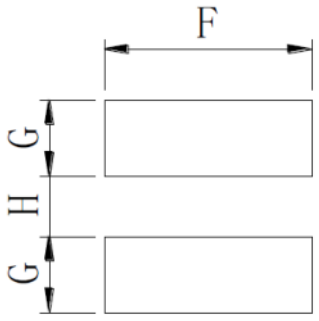
ASPI-0315S - ☐☐☐

Inductance Code	Tolerance	Packaging
Please refer to the table above	M: ±20% N: ±30%	T: Tape and Reel (3kpcs / reel)

MECHANICAL DIMENSIONS:



A	B(Max.)	C(Max.)	D (Ref.)	E (Ref.)
3.7±0.3	1.8	5.5	4.0	1.0



G (Ref.)	H (Ref.)	F (Ref.)
1.5	1.0	4.0

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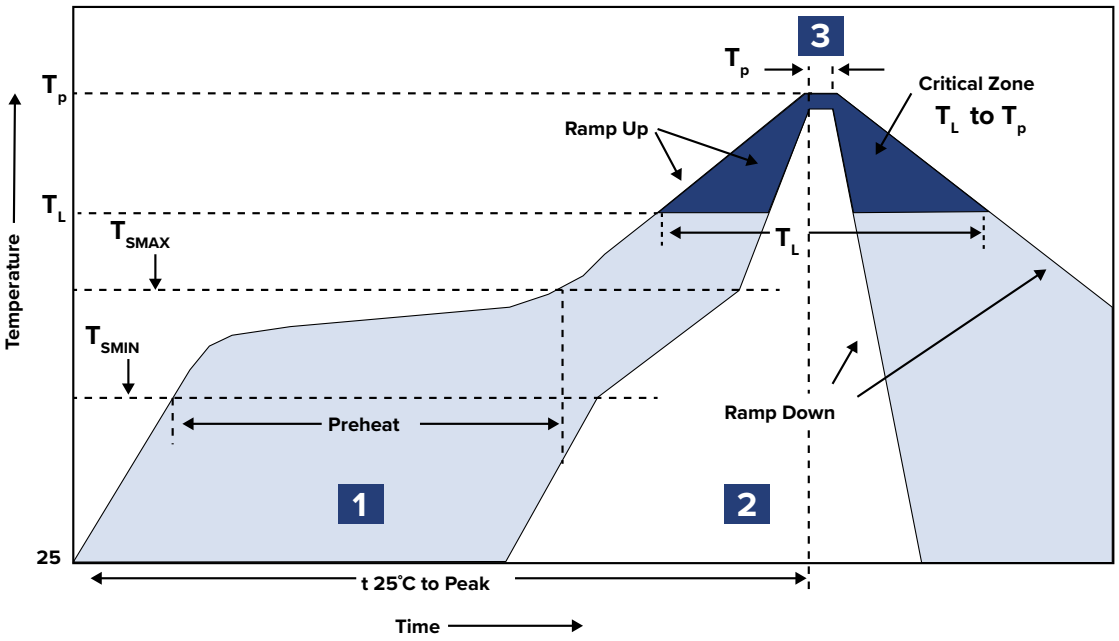
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REFLOW PROFILE:



Zone	Description	Temperature	Time
1	Preheat / Soak	T_{SMAX} 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_P 260°C ±5°C	10 sec. MAX

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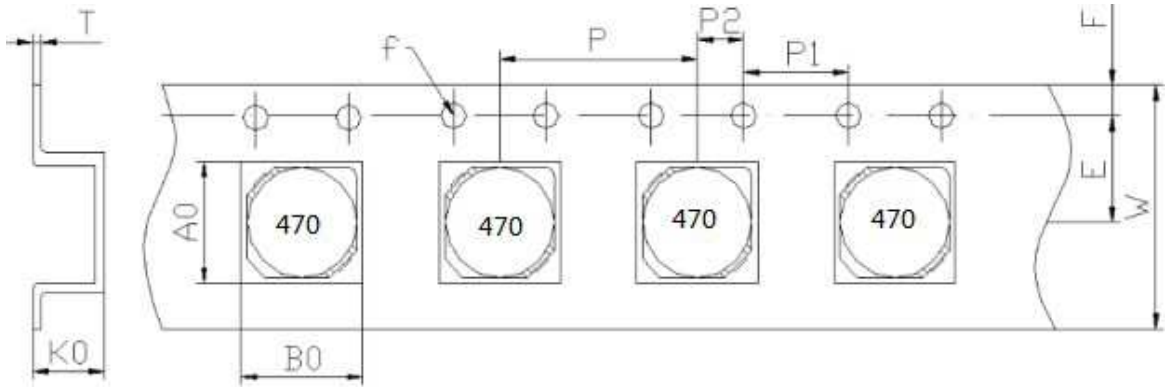
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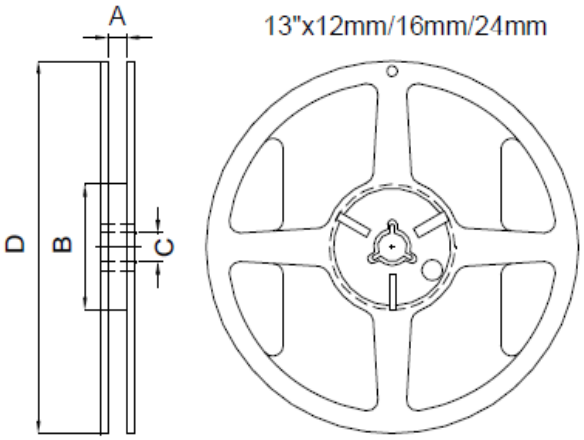
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PACKING:

T: 3,000 pcs / reel



W	A0	B0	K0	P
12 ± 0.3	4.3 ± 0.1	4.3 ± 0.1	1.9 ± 0.1	8 ± 0.1
E	**F**	**P1**	**P2**	**T**
5.5 ± 0.1	1.75 ± 0.1	8.0 ± 0.1	4.0 ± 0.1	0.35 ± 0.05



A	B	C	D
12.5 ± 0.5	100 ± 0.5	13.5 ± 0.5	330 ± 0.5

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