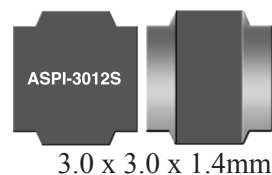


SMD SHIELDED POWER INDUCTOR



ASPI-3012S



RoHS
Compliant

3.0 x 3.0 x 1.4mm

FEATURES:

- Shielded magnetics, low radiation
- Large Terminal surface for good PCB bonding
- Low DCR, High Energy storage, suitable for large currents
- Ideal for a variety of DC-DC converter inductor applications

APPLICATIONS:

- Portable communication equipment
- OA equipment
- LCD, DVD, modem, set-top box
- DC/DC converters

ELECTRICAL SPECIFICATIONS:

Abrakon P/N:	ASPI-3012S Series
Operating Temperature :	-20°C to +120°C
Storage Temperature :	-10°C to +40°C and 70% R.H.

Part Number	Inductance	L Tolerance	Inductance Test Condition	DC Resistance (±30%)	Saturation Current	Temperature Rise Current	Min. Self-resonant frequency
Units	μH	—	—	Ω	A	A	MHz
Symb ol	L	—	—	DCR	I _{sat}	I _{rms}	SR F
ASPI-301 2S-R82	0.82	N	100K, 1V	0.030	2.05	2.47	180
ASPI-301 2S-1R5	1.5	N	100K, 1V	0.045	1.62	2.01	110
ASPI-301 2S-2R4	2.4	N	100K, 1V	0.068	1.30	1.64	100
ASPI-301 2S-3R6	3.6	N	100K, 1V	0.100	1.05	1.36	74
ASPI-301 2S-4R7	4.7	N	100K, 1V	0.120	0.90	1.24	61
ASPI-301 2S-6R8	6.8	N	100K, 1V	0.190	0.75	0.98	61
ASPI-301 2S-100	10	M	100K, 1V	0.265	0.60	0.83	42
ASPI-301 2S-150	15	M	100K, 1V	0.360	0.45	0.71	27
ASPI-301 2S-270	27	M	100K, 1V	0.770	0.40	0.49	21
ASPI-301 2S-330	33	M	100K, 1V	0.875	0.36	0.46	18
ASPI-301 2S-360	36	M	100K, 1V	0.950	0.34	0.44	18
ASPI-301 2S-470	47	M	100K, 1V	1.100	0.27	0.41	14
ASPI-301 2S-560	56	M	100K, 1V	1.380	0.26	0.36	14
ASPI-301 2S-620	62	M	100K, 1V	1.530	0.25	0.35	12
ASPI-301 2S-820	82	M	100K, 1V	1.900	0.22	0.31	12
ASPI-301 2S-101	100	M	100K, 1V	2.860	0.21	0.25	12

Test conditions

- Ambient Temperature: 20±15 °C
- Relative Humidity: 65%±20%
- Air Pressure: 86KPa to 106KPa

Inductance (L): ZM2355 LCR meter or equivalent

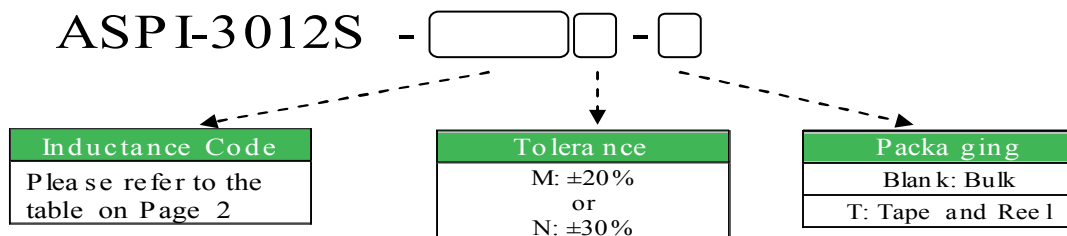
Direct Current Resistance (DCR): HIOKI 3540 or equivalent

Saturation Current (I_{sat}): Saturation current meter

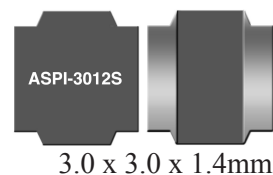
Definition of saturation current (I_{sat}): DC current at which the inductance drops approximate 30% from its value without current

Temperature rise current (I_{rms}): Electric Power, Electric current meter, Thermometer

OPTIONS AND PART IDENTIFICATION



SMD SHIELDED POWER INDUCTOR

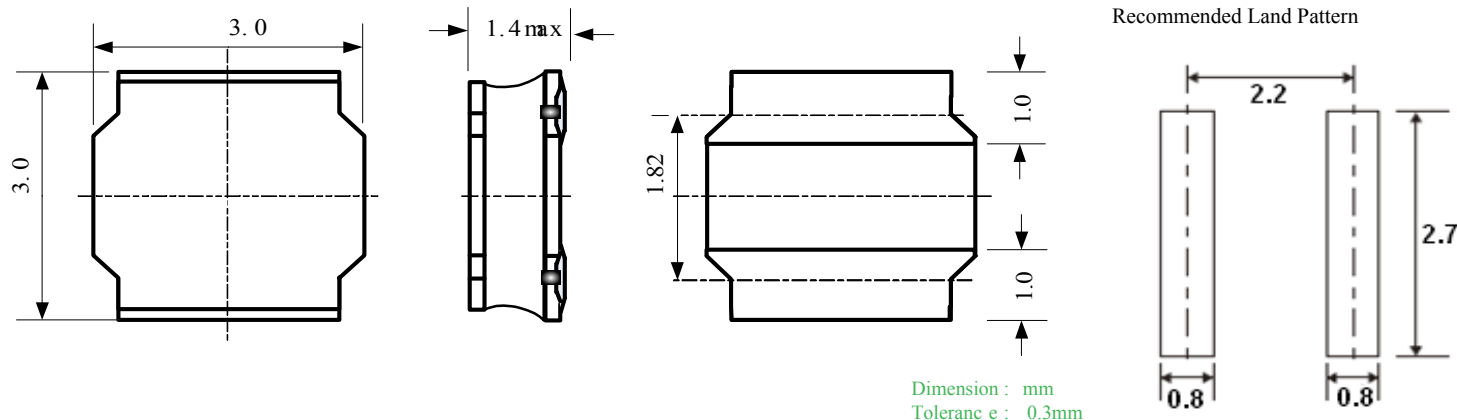


ASPI-3012S



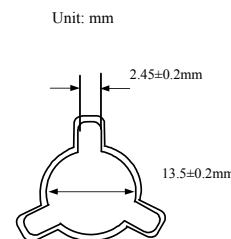
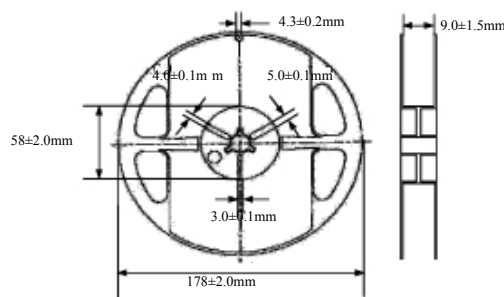
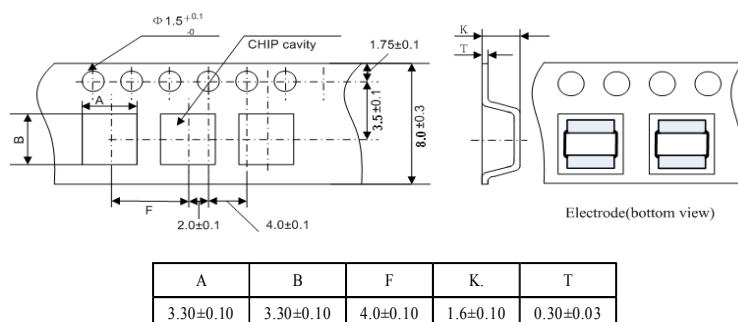
RoHS
Compliant

OUTLINE DRAWING:



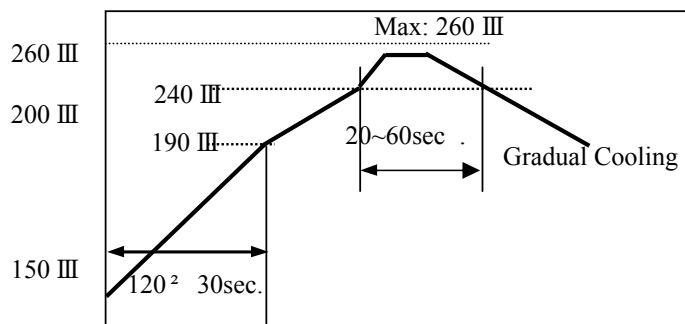
TAPE & REEL:

Tape and reel 2,000pcs/reel



Dimension : mm

REFLOW PROFILE:



1~2 °C/sec. Ramp
Pre-heating: 150~190 °C/120±30sec.
Time above 240 °C: 20~60sec
Peak temperature: 260 °C Max/10sec.
Solder paste: Sn/3.0Ag/0.5Cu
Max.2 times for re-flowing

ATTENTION Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO 9001:2008
CERTIFIED



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