

# SMD SHIELDED POWER INDUCTOR



3.8 x 3.8 x 1.8mm

**ASPI - 0315S**



**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:

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

Part Number	L (μH)	Tolerance	R <sub>DC</sub> (Ω)	I <sub>DC</sub> (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.



5101 Hidden Creek Ln Spicewood TX 78669  
 Phone: 512-371-6159 | Fax: 512-351-8858  
 For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 09-30-20

ABRACON IS  
 ISO9001-2015  
 CERTIFIED

# SMD SHIELDED POWER INDUCTOR



3.8 x 3.8 x 1.8mm

**ASPI - 0315S**



**RoHS**  
Compliant

## ➤ PART IDENTIFICATION:

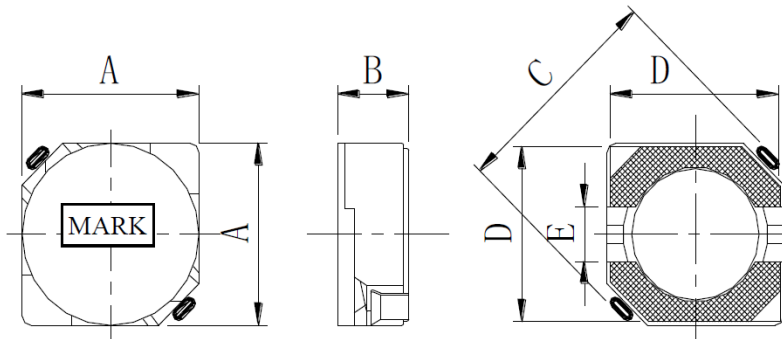
ASPI-0315S -

**Inductance Code**  
Please refer to the table above

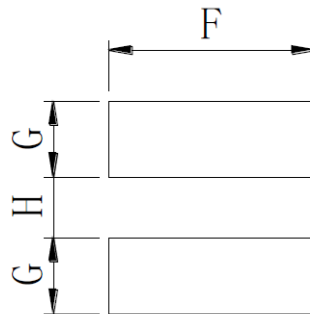
**Tolerance**  
M: ±20%  
N: ±30%

**Packaging**  
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

# SMD SHIELDED POWER INDUCTOR



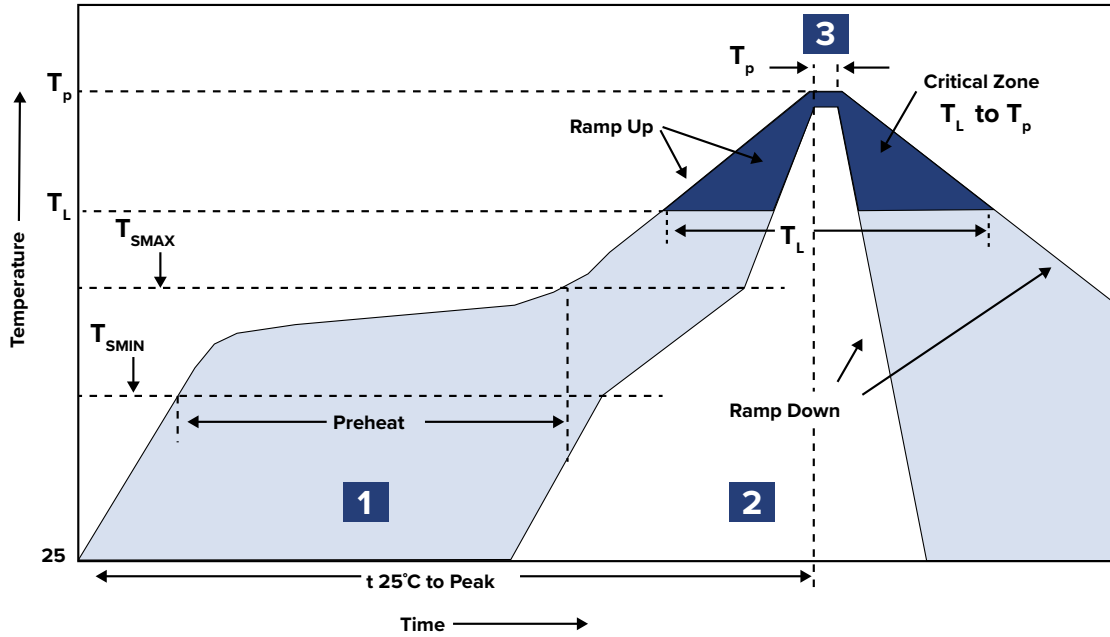
3.8 x 3.8 x 1.8mm

**ASPI - 0315S**



**RoHS**  
Compliant

## 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

# SMD SHIELDED POWER INDUCTOR



3.8 x 3.8 x 1.8mm

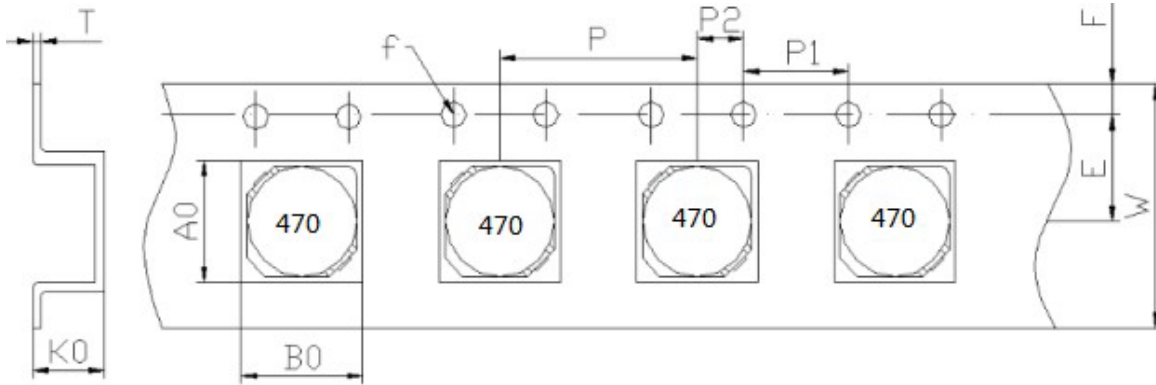
ASPI - 0315S



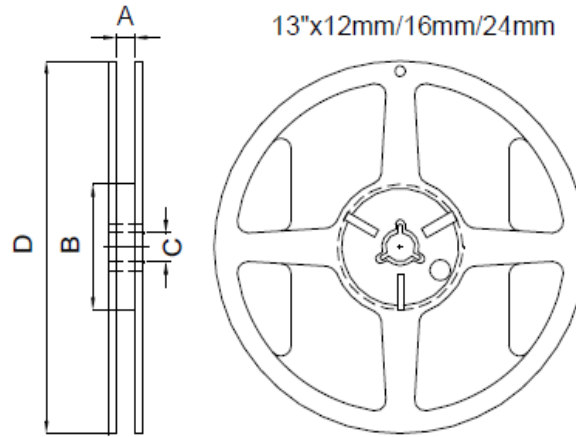
RoHS  
Compliant

## 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

**ATTENTION:** Abracon LLC'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-dependent 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 LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 09-30-20

ABRACON IS  
ISO9001-2015  
CERTIFIED

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Fixed Inductors](#) category:*

*Click to view products by [ABRACON](#) manufacturer:*

Other Similar products are found below :

[CR43NP-680KC](#) [CR54NP-820KC](#) [CR54NP-8R5MC](#) [CTX32CT-100](#) [70F224AI](#) [MGDQ4-00004-P](#) [MHL1ECTTP18NJ](#) [MHL1JCTTD12NJ](#)  
[PE-51506NL](#) [PE-53601NL](#) [PE-53602NL](#) [PE-53630NL](#) [PE-53824SNLT](#) [PE-62892NL](#) [PE-92100NL](#) [PG0434.801NLT](#) [PG0936.113NLT](#)  
[9310-16](#) [PM06-2N7](#) [PM06-39NJ](#) [A01TK](#) [1206CS-471XJ](#) [HC2-2R2TR](#) [HC2LP-R47-R](#) [HC3-2R2-R](#) [HCF1305-3R3-R](#) [1206CS-151XG](#)  
[RCH664NP-140L](#) [RCH664NP-4R7M](#) [RCH8011NP-221L](#) [RCP1317NP-332L](#) [RCP1317NP-391L](#) [RCR1010NP-470M](#) [RCR110DNP-331L](#)  
[DH2280-4R7M](#) [DS1608C-106](#) [ASPI-4020HI-R10M-T](#) [B10TJ](#) [B82477P4333M](#) [B82498B3101J000](#) [B82498B3680J000](#) [ELJ-RE27NJF2](#)  
[1812CS-153XJ](#) [1812CS-183XJ](#) [1812CS-223XJ](#) [1812LS-104XJ](#) [1812LS-105XJ](#) [1812LS-124XJ](#) [1812LS-154XJ](#) [1812LS-223XJ](#)