



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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:

ABRACON P/N:	ASPI-0315 S-xxx
Operating Temperature:	-40°C to +85°C
Storage Temperature:	-55°C to +125°C

### Electrical Characteristics

Part Number	L (μH) ±20%	R <sub>DC</sub> (W) Max	I <sub>DC</sub> (A) Max
ASPI-0315S-3R3	3.3	0.085	1.10
ASPI-0315S-3R9	3.9	0.081	0.75
ASPI-0315S-4R7	4.7	0.105	0.90
ASPI-0315S-5R6	5.6	0.102	0.62
ASPI-0315S-6R8	6.8	0.170	0.73
ASPI-0315S-8R2	8.2	0.140	0.51
ASPI-0315S-100	10	0.210	0.55
ASPI-0315S-120	12.0	0.205	0.42
ASPI-0315S-150	15.0	0.295	0.45
ASPI-0315S-180	18	0.327	0.34
ASPI-0315S-220	22	0.430	0.40
ASPI-0315S-270	27	0.470	0.28
ASPI-0315S-330	33	0.675	0.32
ASPI-0315S-390	39	0.700	0.24
ASPI-0315S-470	47	0.775	0.21
ASPI-0315S-101	100	3.690	0.22
ASPI-0315S-151	150	3.500	0.11
ASPI-0315S-221	220	5.46	0.13
ASPI-0315S-331	330	9.45	0.32

### Testing Condition:

100kHz, 0.1V

IDC: Inductance decreases to 65% of initial value or ?T of coil increased by 30°C

### Test Equipment:

- 1) Test L: ZENTECH 3305 Automatic components Analyzer
- 2) Test RDC: HM 2541A Low-Ohm Auto Sorter
- 3) Test IDC: ZENTECH 3302 Automatic Components Analyzer + ZENTECH 1320 BIAS CURRENT.

## OPTIONS AND PART IDENTIFICATION:

ASPI-0315S - [ ] - [ ] - [ ]

**Inductance Code**

Please refer to the table on page 2

**Tolerance %**

M: ±20%

**Packaging**

T: Tape and Reel



# SMD SHIELDED POWER INDUCTOR



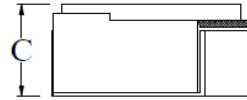
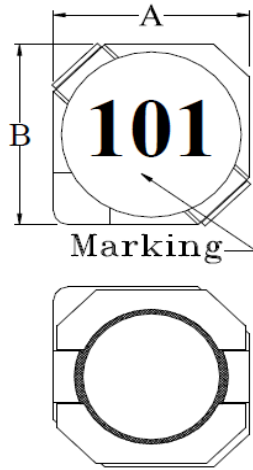
3.8 x 3.8 x 1.8mm

**ASPI - 0315S**

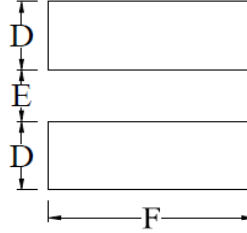


**RoHS**  
Compliant

## OUTLINE DRAWING:



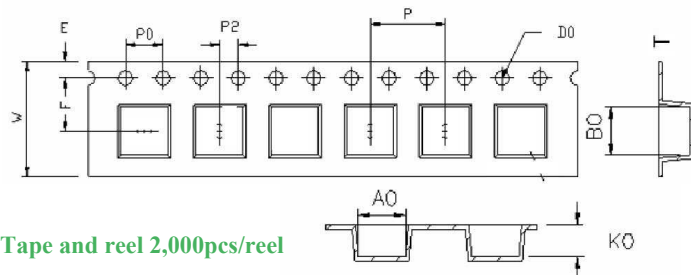
**LAND PATTERNS(mm)**



A	B	C(Max.)	D(Ref.)	E(Ref.)	F(Ref.)
3.8±0.3	3.8±0.3	1.8	1.6	1.2	4.5

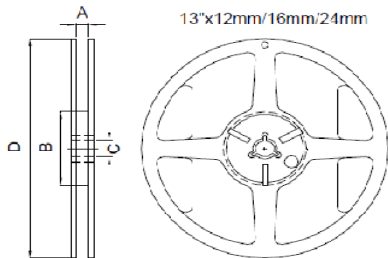
Dimensions: mm

## TAPE & REEL:



Tape and reel 2,000pcs/reel

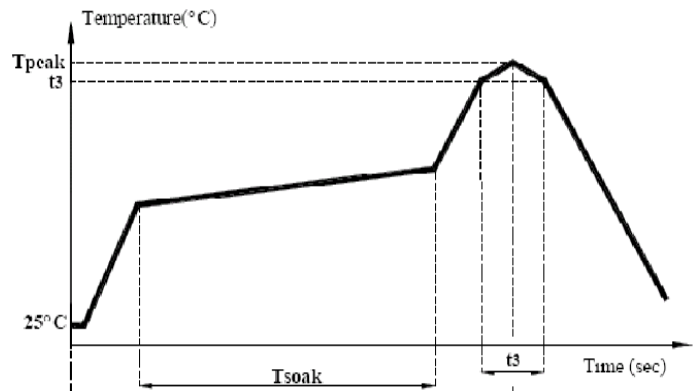
A0	B0	K0	F	E
4.3 ± 0.1	4.2 ± 0.1	2.0 ± 0.1	5.5 ± 0.1	1.75 ± 0.1
W	P	P0	P2	T
12 ± 0.3	8.0 ± 0.1	4.0 ± 0.1	2.0 ± 0.1	0.35 ± 0.05



Dimensions: mm

A	B	C	D
12.5 ± 0.5	100 ± 0.5	13.2 ± 0.3	330 ± 1.0

## REFLOW PROFILE:



Item	Mark	Product
Temperature rise gradient		3°C/sec (max)
Heating time	Tsoak	50s ~ 150s
Heating temperature		120°C~180°C
Time over 217°C	t1	90 sec
Time within 5°C of actual peak temperature	t3	10~30 sec
Peak temperature	Tpeak	255 ~ 260 °C
Time 25°C to peak Temperature		6 minutes max.

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