



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!



## Contact us

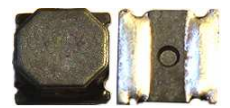
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# LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR



4.0 x 4.0 x 1.8mm/  
4.0 x 4.0 x 1.88mm

ASPI-0418FS



**RoHS**  
Compliant

## FEATURES:

- Small size and low profile: 1.88mm max.
- Small DCR and high rated current
- High reliability to mechanical strength
- 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:

Abrakon P/N:	ASPI-0418FS Series
Operating Temperature & Humidity :	-25°C to +120°C (Including self generated heat)
Storage Temperature & Humidity:	-10°C to +40°C, 30% to 70% RH

Part Number	Inductance	Inductance Tolerance	DCR	DCR Tolerance	Saturation Current	Temperature Rise Current
Units	μH	%	mΩ	%	A	A
Symbol	L	M, N	DCR		Isat	Irms
ASPI-0418FS-R82	0.82	N	16	±30%	4.20	4.00
ASPI-0418FS-1R0	1.0	N	19		4.70	3.70
ASPI-0418FS-1R2	1.2	N	21		4.00	3.50
ASPI-0418FS-1R5	1.5	N	27		3.50	3.10
ASPI-0418FS-2R2	2.2	M	37		±20%	3.00
ASPI-0418FS-2R7	2.7	M	43	2.40		2.30
ASPI-0418FS-3R3	3.3	M	55	2.30		2.20
ASPI-0418FS-4R7	4.7	M	70	2.00		1.90
ASPI-0418FS-6R8	6.8	M	98	1.60		1.50
ASPI-0418FS-100	10	M	150	1.40		1.30
ASPI-0418FS-150	15	M	220	1.10		1.00
ASPI-0418FS-220	22	M	290	0.95		0.90
ASPI-0418FS-330	33	M	460	0.75		0.70
ASPI-0418FS-470	47	M	650	0.62		0.60
ASPI-0418FS-680	68	M	940	0.50		0.50
ASPI-0418FS-101	100	M	1330	0.45		0.42
ASPI-0418FS-151	150	M	2000	0.35		0.32
ASPI-0418FS-221	220	M	2960	0.30	0.28	

### 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 ( $\Delta L/L_0 : \leq -30\%$ )
4. Irms : Based on temperature rise ( $\Delta T : 40^\circ\text{C TYP.}$  )
5. Test Freq: 100KHz, 1Vrms

## OPTIONS AND PART IDENTIFICATION

ASPI-0418FS--

**Inductance Code**  
Please refer to the Electrical Spec Table

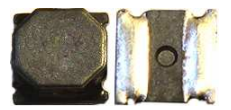
**Tolerance**  
N: ±30%\*  
M: ±20%\*

**Packaging**  
T3: Tape and Reel (3kpcs / reel)

\*N for L = 0.82 ~ 1.5μH  
\*M for L = 2.2 ~ 220μH



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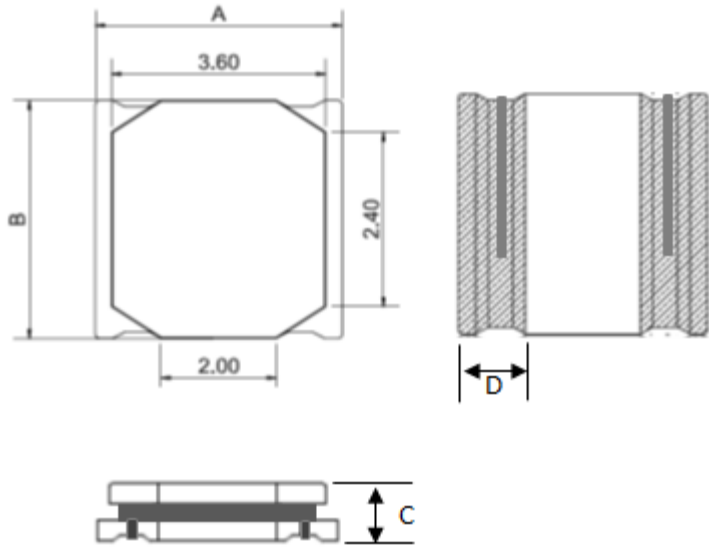
ASPI-0418FS



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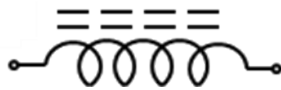
## OUTLINE DRAWING:

Mechanical Dimensions (Effective date: 11/21/2012)



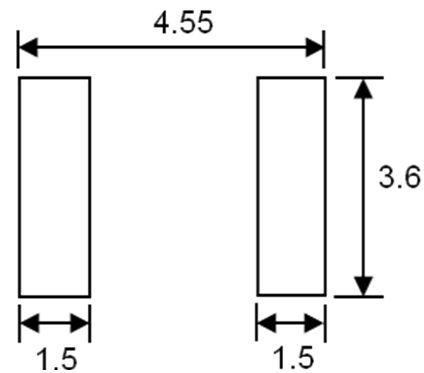
A	B	C Max.	D
4.0±0.2	4.0±0.2	1.88 for R82-2R7 1.80 for 3R3-221	1.3

### Circuit Schematic



**No Polarity**

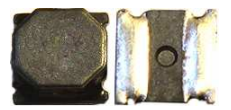
### Recommended Land Pattern



Dimension: mm



# LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR



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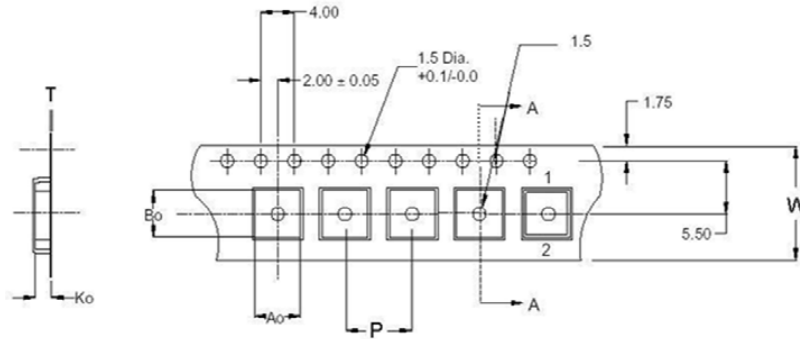
ASPI-0418FS



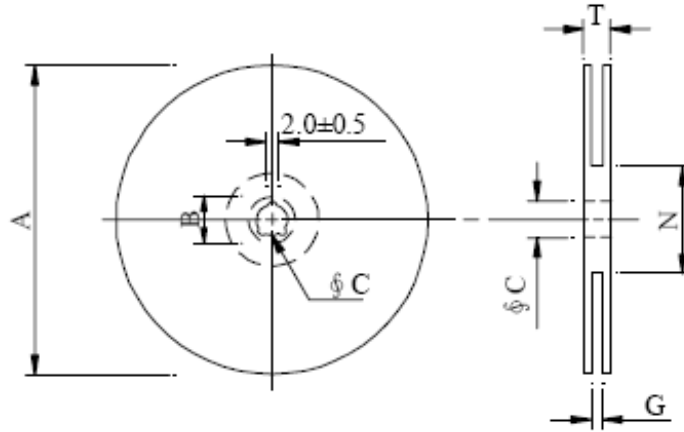
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## TAPE & REEL:

T3: 3,000pcs / reel



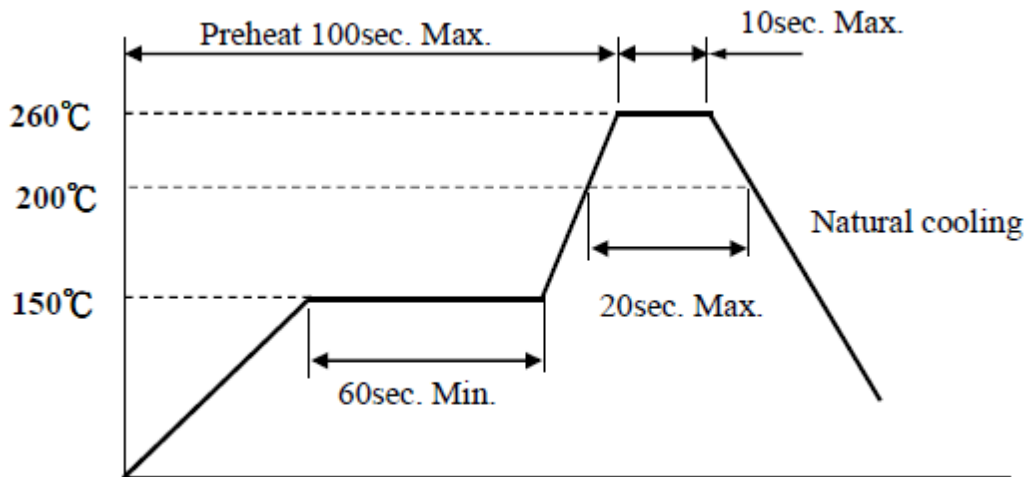
Ao	4.50
Bo	4.35
Ko	1.90
W	12
P	8
T	0.3



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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