

# LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR



4.0 x 4.0 x 2.5mm

ASPI-0425



**RoHS**  
Compliant

## FEATURES:

- Small size and low profile: 2.5mm
- 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:

Abracon 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-0425-1R0	1.0	N	12	±30%	3.00	3.00
ASPI-0425-1R2	1.2	N	18		2.75	2.75
ASPI-0425-2R2	2.2	N	22		2.10	2.10
ASPI-0425-3R3	3.3	M	30	±20%	1.60	1.60
ASPI-0425-4R7	4.7	M	40		1.40	1.40
ASPI-0425-6R8	6.8	M	70		1.20	1.20
ASPI-0425-100	10	M	85		0.97	0.97
ASPI-0425-150	15	M	120		0.77	0.77
ASPI-0425-220	22	M	195		0.67	0.67
ASPI-0425-330	33	M	305		0.50	0.50
ASPI-0425-470	47	M	495		0.40	0.40
ASPI-0425-680	68	M	710		0.35	0.35
ASPI-0425-101	100	M	1000		0.30	0.30
ASPI-0425-151	150	M	1600	0.22	0.22	
ASPI-0425-221	220	M	2300	0.20	0.20	

### 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-0425---

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

**Tolerance**  
N: ±30%\*  
M: ±20%\*

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

\*N for L = 1.0 ~ 2.2μH  
\*M for L = 3.3 ~ 220μH



# LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR



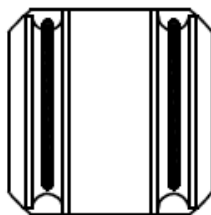
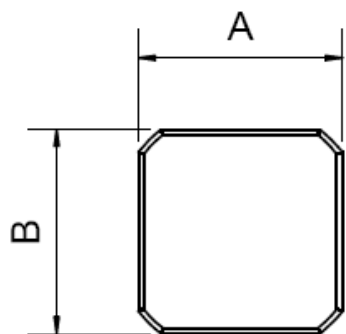
4.0 x 4.0 x 2.5mm

ASPI-0425

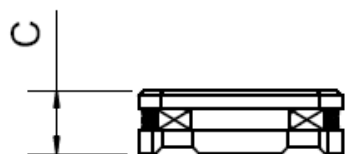


**RoHS**  
Compliant

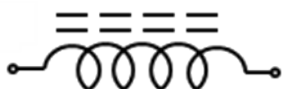
## OUTLINE DRAWING:



A	B	C Max.
4.0±0.2	4.0±0.2	2.5

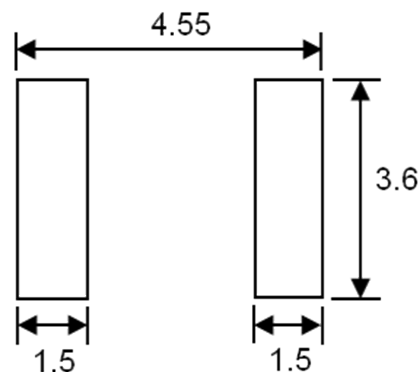


Circuit Schematic



No Polarity

Recommended Land Pattern



Dimension: mm

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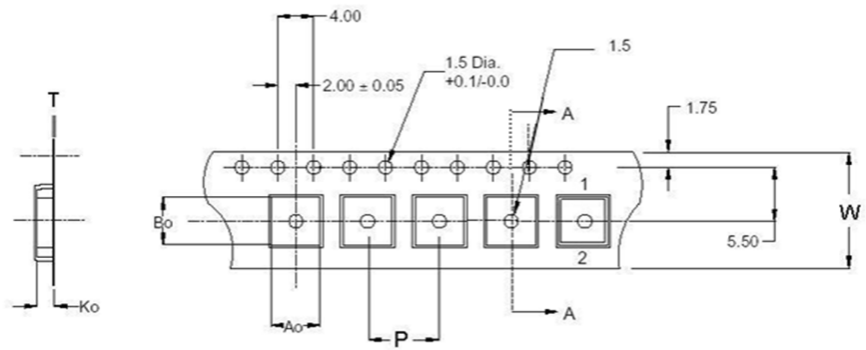
4.0 x 4.0 x 1.8mm

ASPI-0418FS

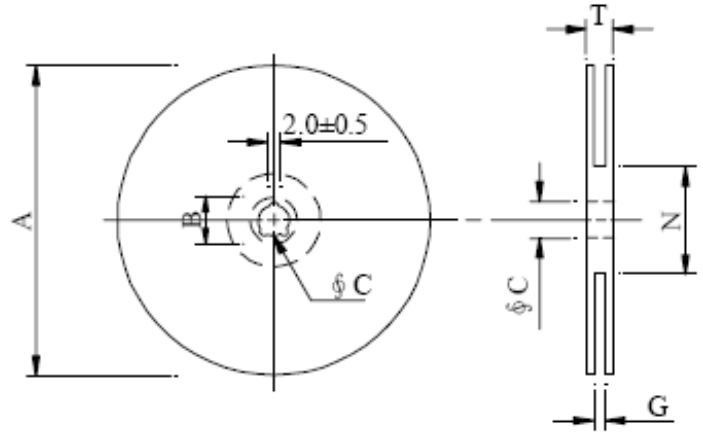
**Pb** | **RoHS**  
Compliant

## TAPE & REEL:

T3: 3,000pcs / reel



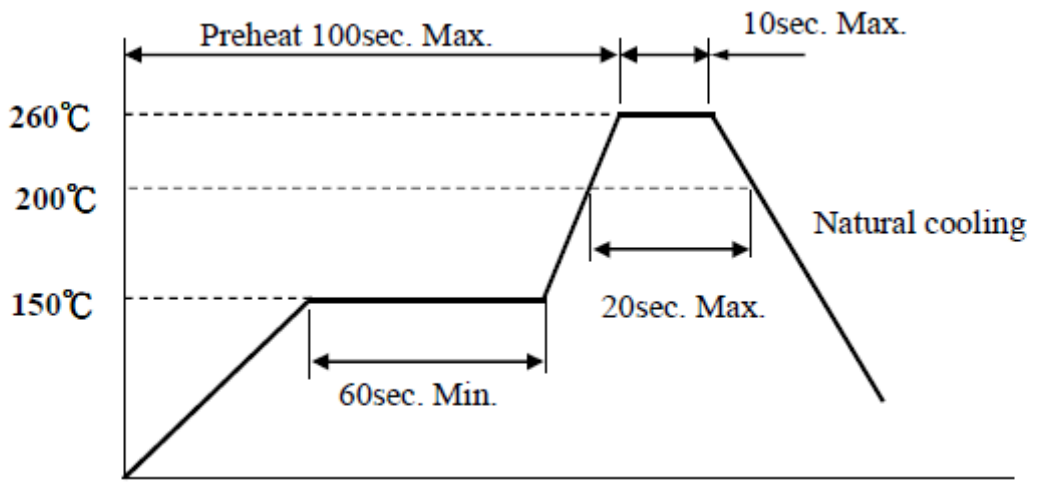
Ao	4.20
Bo	4.20
Ko	2.75
W	12
P	8
T	0.3



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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