

LOW PROFILE SHIELDED SMD CHIP POWER INDUCTOR

ASPI-0615FS



RoHS/RoHS II Compliant



6.0 x 6.0 x 2.0mm

FEATURES:

- Small size and low profile: 2.0mm
- Small DCR and high rated current
- High reliability to mechanical strength
- Magnetically shielded by magnetic powder molding
- Suitable for RoHS reflow profile

APPLICATIONS:

- DC/DC converter for LCD display of notebook PC
- Portable communication equipment
- Digital cameras

ELECTRICAL SPECIFICATIONS:

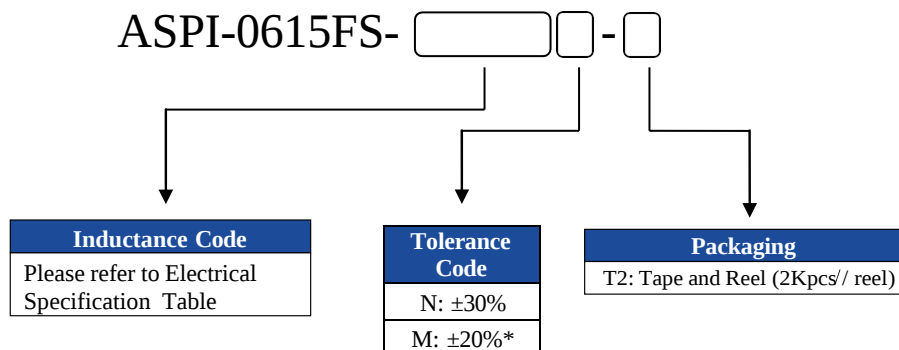
Abracon P/N:	ASPI-0615FS Series
Operating Temperature & Humidity :	-40°C to +125°C (Including self generated heat)
Storage Temperature & Humidity:	-40°C to +125°C

Part Number ASPI-0615FS- Inductance Code	Inductance	Inductance Tolerance	DCR	DCR Tolerance	Saturation Current	Temperature Rise Current
Units	H	%	mΩ	%	A	A
Symbol	L	M, N	DCR		Isat	Irms
ASPI-0615FS-R50	0.5	N	9	±30%	7.00	5.20
ASPI-0615FS-R80	0.8	N	12		6.00	4.10
ASPI-0615FS-1R5	1.5	N	17		4.00	3.60
ASPI-0615FS-2R2	2.2	N	24		3.50	2.90
ASPI-0615FS-3R3	3.3	M	30	±20%	2.80	2.80
ASPI-0615FS-4R7	4.7	M	43		2.40	2.20
ASPI-0615FS-5R6	5.6	M	55		2.20	2.00
ASPI-0615FS-6R8	6.8	M	60		2.00	1.80
ASPI-0615FS-100	10	M	90		1.90	1.50
ASPI-0615FS-150	15	M	120		1.30	1.20
ASPI-0615FS-220	22	M	170		1.10	1.00
ASPI-0615FS-330	33	M	310		0.90	0.90
ASPI-0615FS-470	47	M	370		0.80	0.80

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



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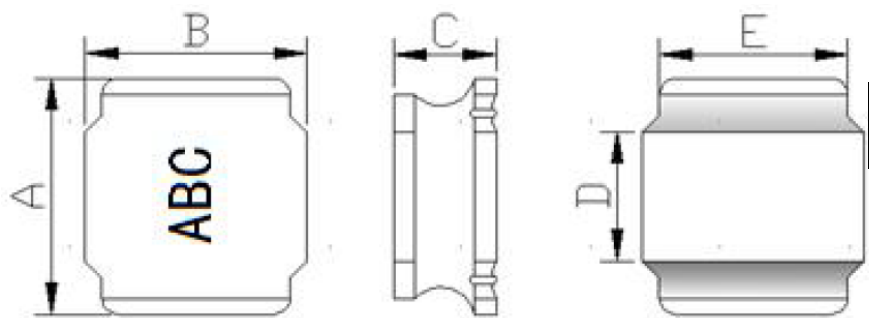
6.0 x 6.0 x 2.0mm

ASPI-0615FS

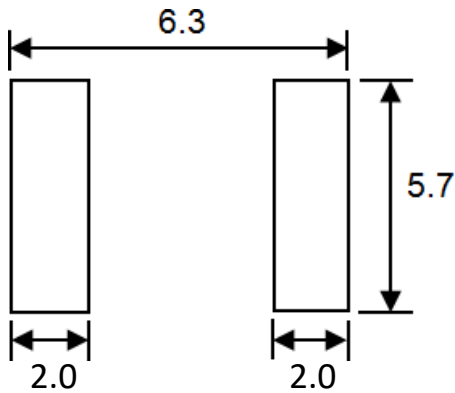


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OUTLINE DRAWING:



A	B	C	D	E Typ.
6.0±0.3	6.0±0.3	2.0 MAX	2.7±0.2	4.9



Recommended Land Pattern

Dimension: mm

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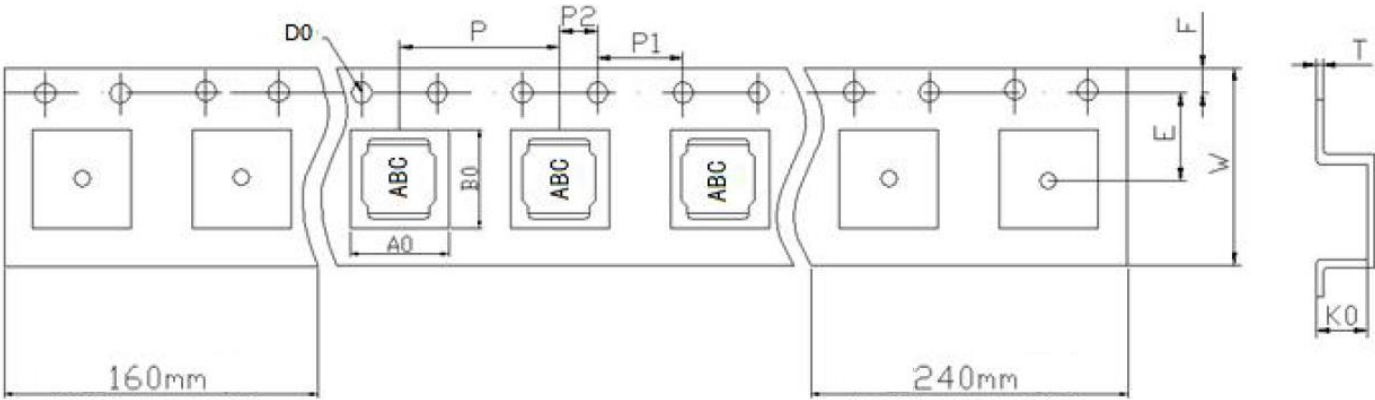
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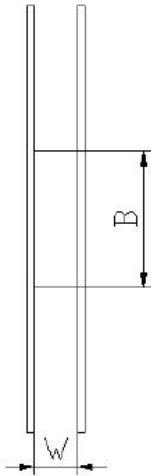
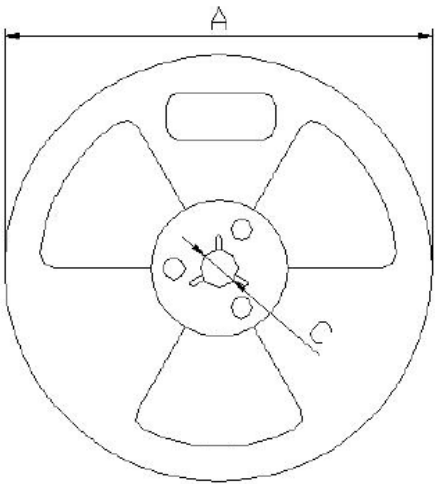
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TAPE & REEL:

T2: 2,000pcs / reel



Dim	W	A0	B0	K0	P	E	F	D0	P0	P2	T
ASPI-0615FS	12.0±0.3	6.3±0.1	6.3±0.1	2.2±0.1	8.0±0.1	7.5±0.1	1.75±0.1	1.5±0.1	4.0±0.1	2.0±0.1	0.35±0.05



A	330±0.5
B	100±0.5
C	13.5±0.5
W	12.5±0.5

Dimension: mm

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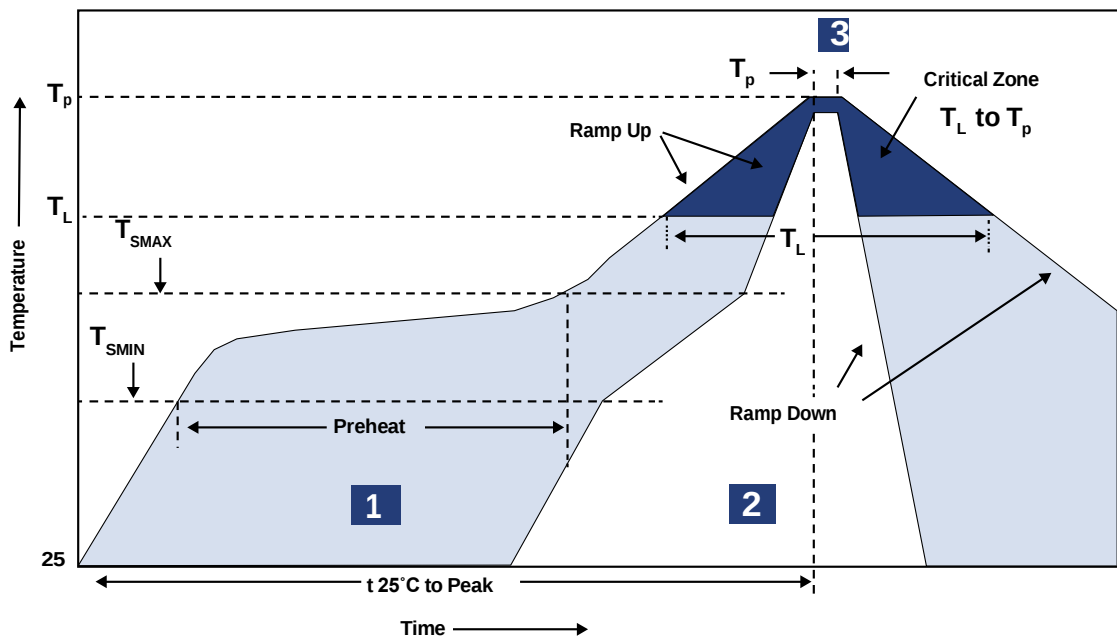


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REFLOW PROFILE:



Zone	Description	Temperature	Time
1	Preheat / Soak	T_{SMAX} 150°C	60 ~ 100 sec.
2	Reflow	T_L 200°C	20 sec. MAX
3	Peak heat	T_P 260°C	10 sec. MAX

Dimension: mm

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