Low Profile Shielded SMD Chip Power Inductor



ASPI-0628 Series

Request Samples Check Inventory

6.0 x 6.0 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Small size and low profile: 2.8mm
- Small DCR and high rated current
- High reliability to mechanical stress
- 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

Part Number ASPI-0628- Inductance Code	Inductance	Inductance Tolerance	DCR	DCR Tolerance	Saturation Current	Temperature Rise Current
Units	µH	%	mΩ	%	A	A
Symbol	L	M, N	DCR		Isat	Irms
ASPI-0628-0R9	0.9	N	13	±30%	6.70	4.60
ASPI-0628-1R5	1.5	N	16		5.10	4.20
ASPI-0628-2R2	2.2	N	20		4.20	3.70
ASPI-0628-3R0	3.0	N	23		3.60	3.40
ASPI-0628-3R3	3.3	M	28	±20%	3.60	3.40
ASPI-0628-3R9	3.9	M	31		2.70	3.00
ASPI-0628-4R7	4.7	M	31		2.70	3.00
ASPI-0628-6R0	6.0	M	40		2.50	2.50
ASPI-0628-6R2	6.2	M	52		2.20	2.20
ASPI-0628-6R8	6.8	M	52		2.20	2.20
ASPI-0628-100	10	M	65		1.90	1.90
ASPI-0628-150	15	M	95		1.60	1.80
ASPI-0628-220	22	M	135		1.30	1.40
ASPI-0628-330	33	M	220		1.10	1.10
ASPI-0628-470	47	M	300		1.00	0.92
ASPI-0628-680	68	M	420		0.80	0.77
ASPI-0628-101	100	M	600		0.65	0.66

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 (△L/Lo : ≤ -30%)
4. Irms : Based on temperature rise (△T : 40°C TYP.)
5. Test Freq: 100KHz, 1Vrms

Operating Temperature:-25˚C to +120˚C (Including self generated heat)
Storage Temperature and Humidity: -10˚C to +40˚C, 30% to 70% RH

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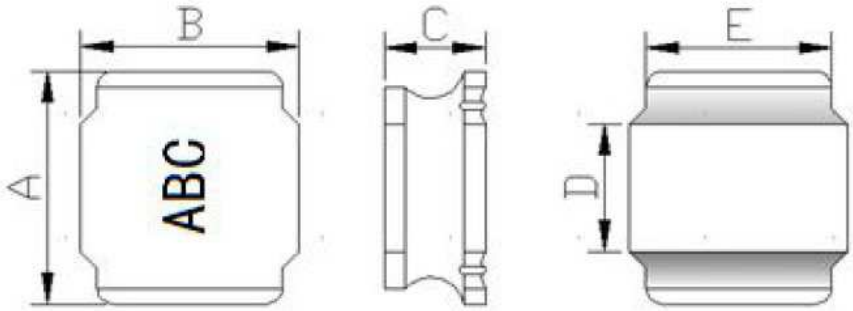


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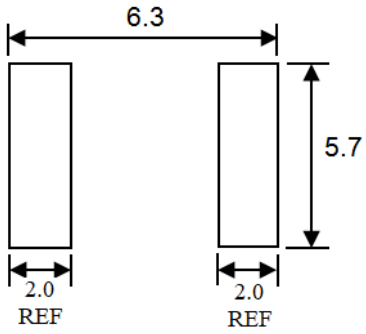
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Mechanical Specifications



A	B	C Max.	D Typ.
6.0±0.3	6.0±0.3	2.8	1.50



Recommended Land Pattern

Dimension: mm

Part Identification

ASPI-0628-□□-□

Inductance Code	Tolerance	Packaging
Please refer to the Electrical Spec Table	N: ±30%* M: ±20%*	T1 Tape and Reel (1kpcs / reel)

*N for L = 0.9 ~ 3.0μH
*M for L = 3.3 ~ 100μH

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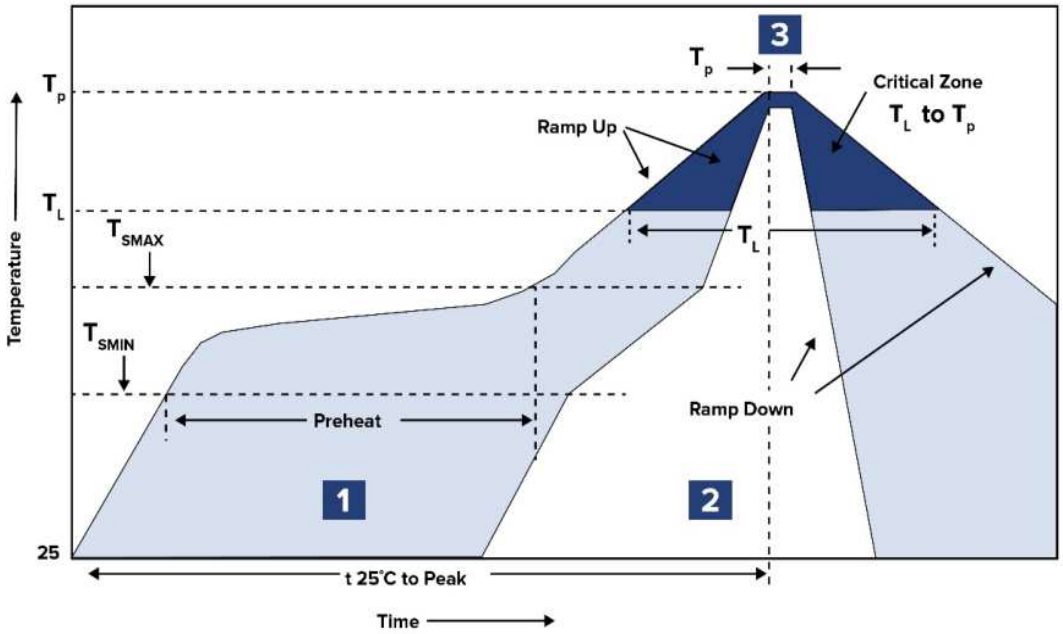


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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 100 sec.
2	Reflow	T_L 217°C	20 sec. MAX
3	Peak heat	T_P 260°C±5°C	10 sec. MAX

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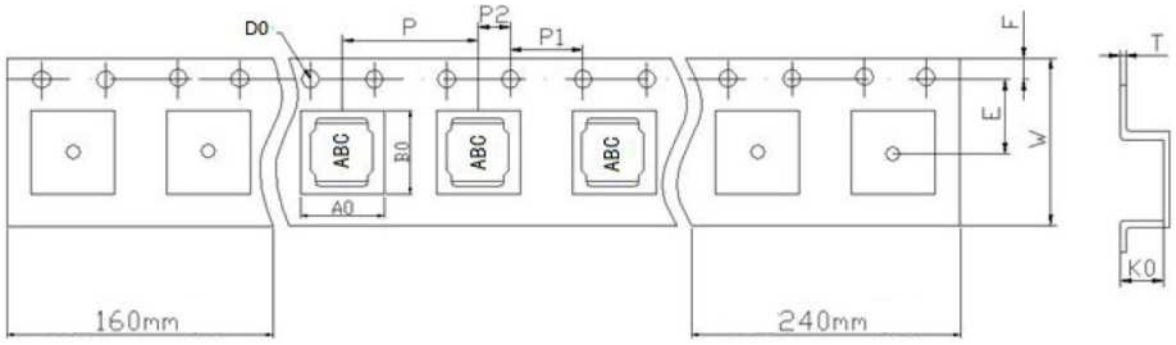
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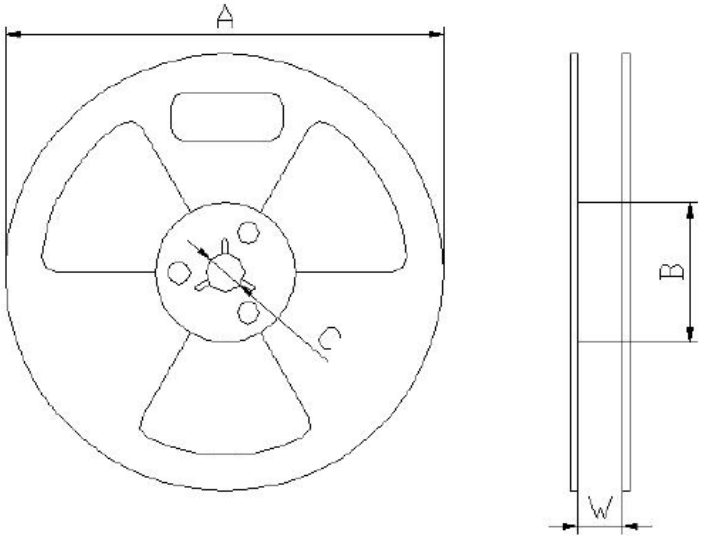
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Packaging

T1: 1,000pcs / 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	3.0 ±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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