

Molded SMD Power Inductor



ASPI-F4030

Request Samples



Check Inventory



4.1 x 4.1 x 3.1mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Shielded construction
- Soft saturation
- Low DCR, High Efficiency
- High temperature current rating

Applications

- Body electronics and comfort system
- Infotainment and entertainment
- Electric vehicles
- Lighting
- Solar inverters and power
- Industrial and robotics
- Medium and high-power switch mode power supplies.

Electrical Specifications

Part Number	Inductance	Tolerance	DC Resistance		Saturation Current	Temperature Rise Current
	0.1MHz/1.0V		Max	Typ.	Typ.	Typ.
Units	μH	%	mΩ		A	A
Symbol	L	M	DCR		Isat	Irms
ASPI-F4030-R13M-T	0.13	20	1.8	1.5	26.5	27.0
ASPI-F4030-R27M-T	0.27	20	2.4	2.2	19.3	24.2
ASPI-F4030-R30M-T	0.30	20	2.9	2.5	17.0	24.0
ASPI-F4030-R40M-T	0.40	20	3.2	2.8	15.5	22.5
ASPI-F4030-R47M-T	0.47	20	3.9	3.4	14.2	21.2
ASPI-F4030-R62M-T	0.62	20	4.6	4.1	12.7	15.0
ASPI-F4030-R76M-T	0.76	20	5.5	4.9	11.8	14.2
ASPI-F4030-1R0M-T	1.0	20	7.2	6.5	10.3	13.0
ASPI-F4030-1R2M-T	1.2	20	9.4	8.5	9.2	12.2
ASPI-F4030-1R5M-T	1.5	20	10.5	9.5	8.8	10.2
ASPI-F4030-2R2M-T	2.2	20	15.0	13.5	7.0	8.7
ASPI-F4030-3R3M-T	3.3	20	21.9	19.9	5.3	7.5
ASPI-F4030-4R7M-T	4.7	20	31.5	28.5	4.4	6.6
ASPI-F4030-5R6M-T	5.6	20	34.7	31.5	4.2	5.5
ASPI-F4030-6R8M-T	6.8	20	47.9	43.5	3.7	4.7
ASPI-F4030-8R2M-T	8.2	20	55.7	50.6	3.5	4.2
ASPI-F4030-100M-T	10.0	20	69.5	63.0	3.1	3.9
ASPI-F4030-120M-T	12.0	20	86.5	78.5	2.7	3.4

Test Conditions

Isat: DC current at which the inductance drops 30% from its value without current.

Irms: DC current that causes the temperature rise (ΔT , approximate 40 °C) from 25°C ambient.

Operating Temperature: -55°C ~ +125°C (including self-temperature rise)

Storage Condition: -55°C ~ +125°C (on board), 25°C ~ +35°C (with packaging) and R.H. 85 max

ASPI-F4030 Series is RoHS Compliant and Pb free



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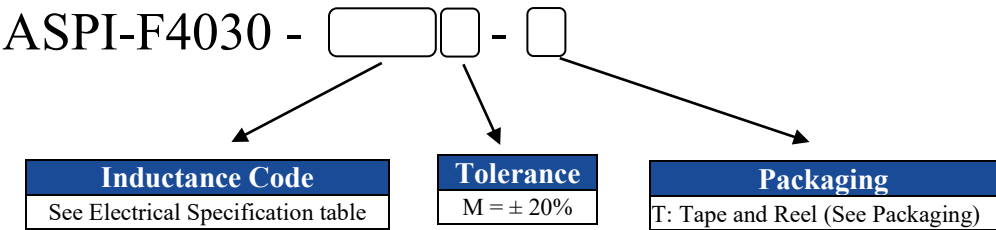


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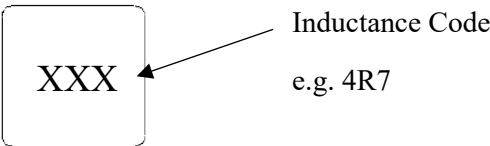


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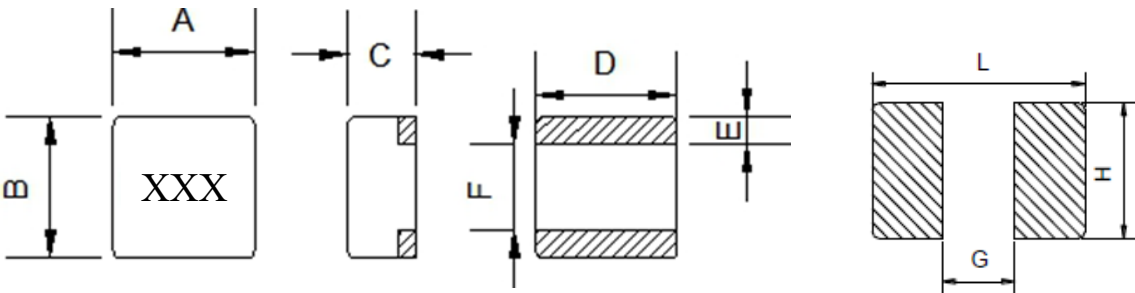


Marking



Marking Method = Ink Marking

Mechanical Specifications



Series	A	B	C	D	E	F	G	H	L
ASPI-F4030	4.1 $\pm$ 0.3	4.1 $\pm$ 0.3	3.1 Max	4.1 $\pm$ 0.3	1.3 $\pm$ 0.3	1.5 $\pm$ 0.3	1.3 Ref.	4.5 Ref.	4.5 Ref.

Dimensions: mm

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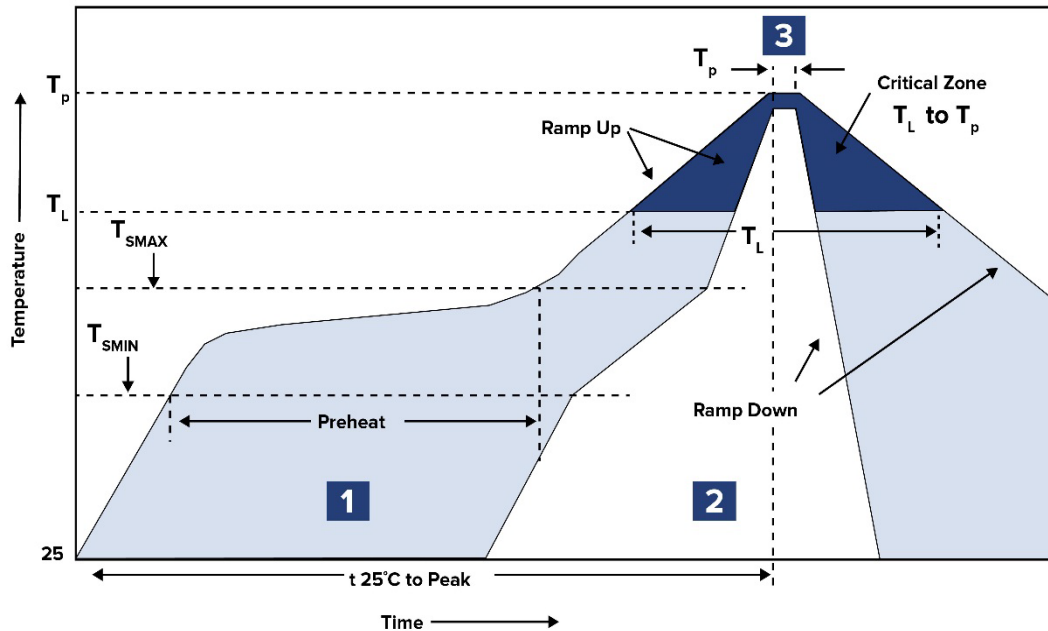


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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ $150^\circ\text{C} \sim 200^\circ\text{C}$	20 ~ 120 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_P 260°C	10 sec. MAX

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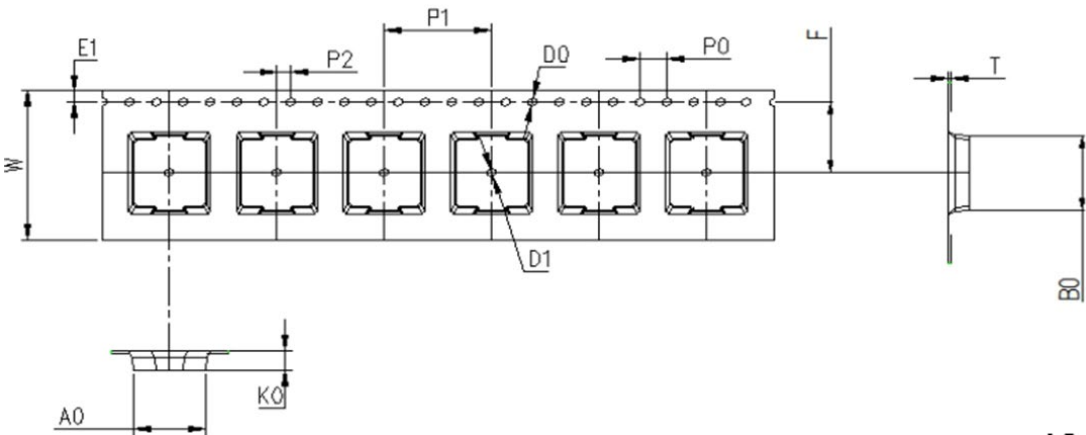
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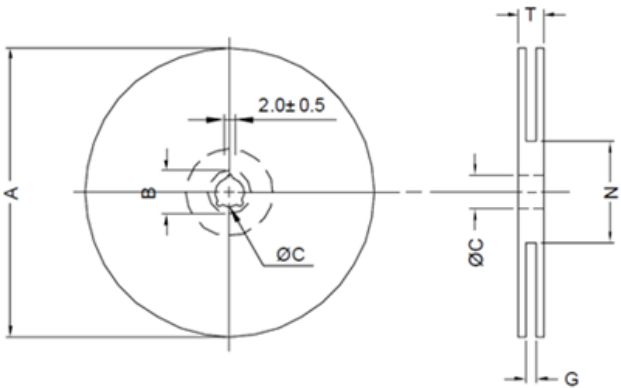
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Packaging

Tape & Reel: 2000 pcs/reel



A0	B0	K0	P0	P1	P2	W	T	D0
4.6±0.1	5.2±0.1	3.30±0.1	4.00±0.1	8.00±0.1	2.0±0.05	12.00+0.1/-0.2	0.35±0.05	1.50±0.1



A	C	G	N	T
330.0 ± 2.0	13.0±0.5	12.4±1.0	100.0 ± 1.0	18.4 Max

Dimensions: mm

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