

# Molded SMD Power Inductor



**ASPI-F1060**

Request Samples



Check Inventory



**11.9 x 11.0 x 5.7 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 1**

## Features

- Shielded construction
- Soft saturation
- Low DCR, High Efficiency
- Designed for switching frequencies between 100KHz-2MHz

## 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	Electrode Length
	0.1MHz/0.1V		Max	Max	Typ.	± 0.5
Units	μH	%	mΩ	A	A	mm
Symbol	L		DCR	Isat	Irms	D
ASPI-F1060-R68	0.68	M	1.50	50.0	34.0	9.5
ASPI-F1060-1R0	1.00	M	2.32	44.0	28.5	9.0
ASPI-F1060-1R2	1.20	M	2.64	40.0	26.5	9.0
ASPI-F1060-1R5	1.50	M	3.30	36.0	24.5	9.0
ASPI-F1060-2R2	2.20	M	4.84	30.0	20.0	9.0
ASPI-F1060-3R3	3.30	M	7.70	25.0	16.8	9.0
ASPI-F1060-4R7	4.70	M	10.72	22.0	14.0	9.0
ASPI-F1060-5R6	5.60	M	11.90	17.0	12.0	8.8
ASPI-F1060-6R8	6.80	M	13.0	15.5	10.5	8.8
ASPI-F1060-8R2	8.20	M	16.5	14.0	9.5	8.8
ASPI-F1060-100	10.0	M	18.2	13.0	9.0	8.8

### Test Conditions

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

**Irms:** DC current that causes the temperature rise ( $\Delta T$ , approximate 40 °C) from 20°C ambient

**Operating Temperature:** -40°C ~ +125°C (including self-temperature rise)

**Storage Condition:** -40°C ~ +125°C (PCB mounted) and R.H. 60 max

**Operating Voltage:** 40V (across inductor)

**ASPI-F1060 Series is RoHS Compliant and Pb free**

**MSL level: 1**



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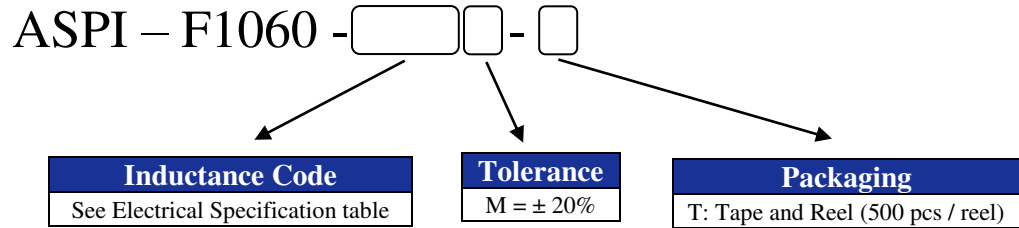


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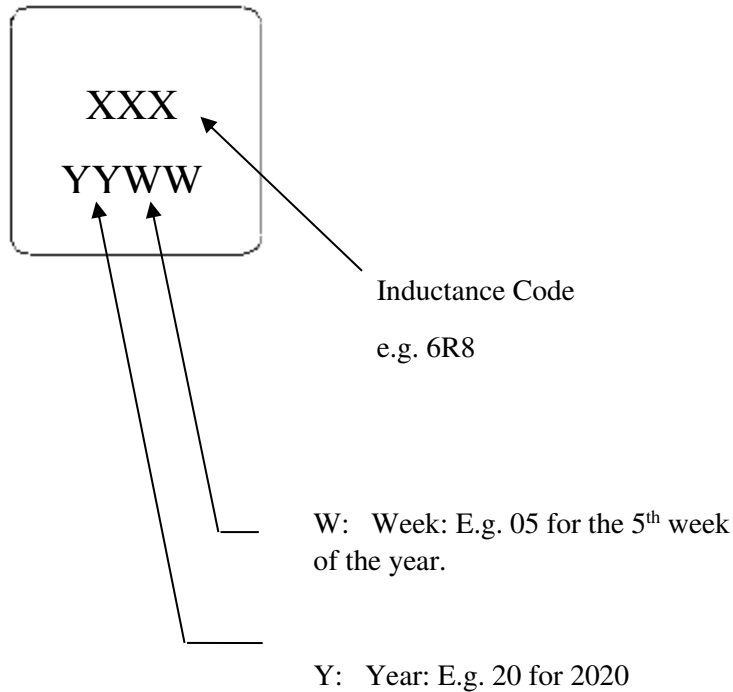


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## Part Number Identification



## Marking



**Marking Method = Ink Marking**

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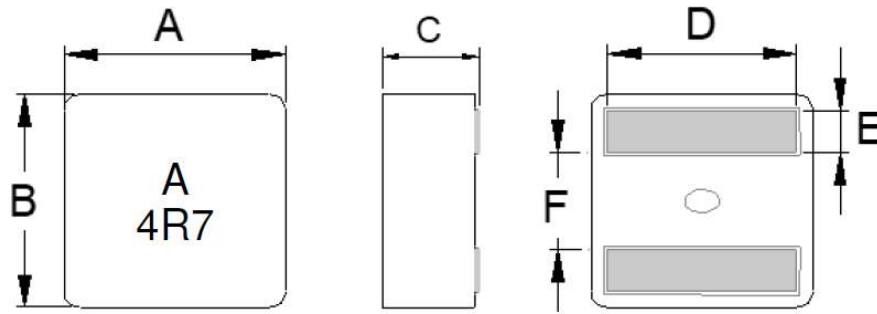


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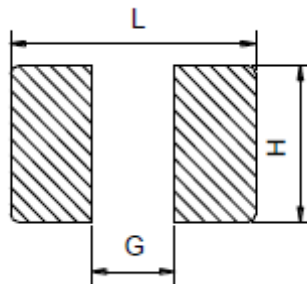


**11.9 x 11.0 x 5.7 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 1**

## Mechanical Dimensions



Series	A	B	C	D	E	F
ASPI-F1060	11.9 ± 0.3	11.0 ± 0.3	5.7 ± 0.3	See Electrical Specs table	2.4 ± 0.2	4.5 ± 0.3



L	G	H
10.5 Ref.	3.7 Ref.	11.0 Ref.

Dimensions: mm

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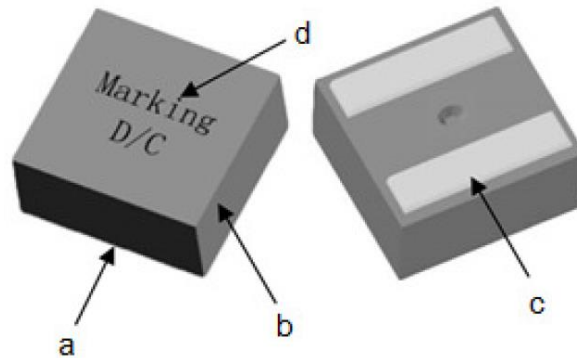


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**11.9 x 11.0 x 5.7 mm**  
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## Materials



	Components	Material
a	Core	Alloy powder
b	Wire	220 deg. C Flat Wire
c	Solder	100% Pb free solder
d	Ink	Halogen-free ketone

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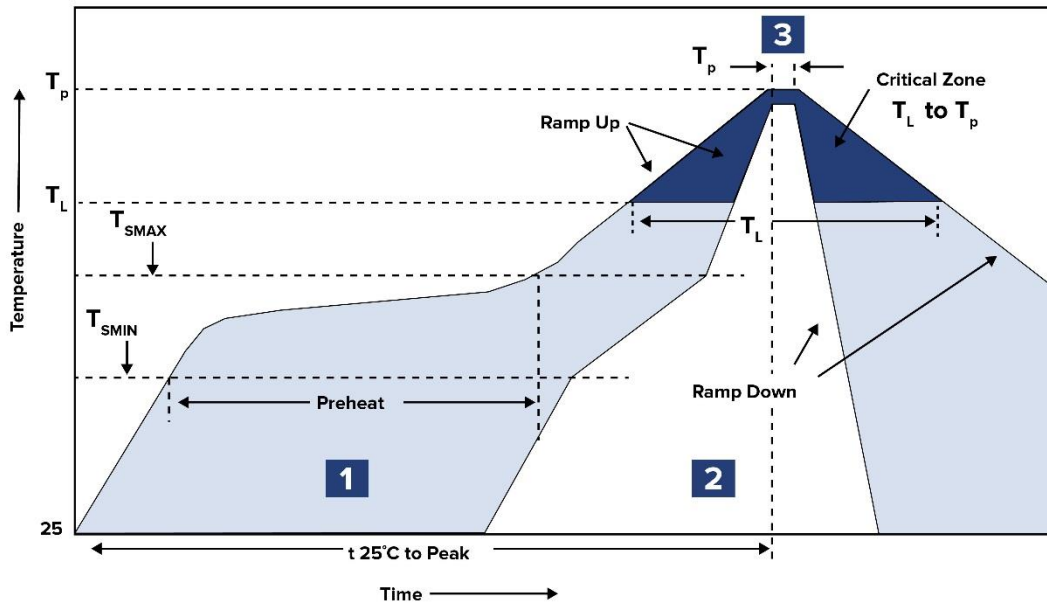


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## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	$T_L$ 217°C	60 ~ 150 sec.
3	Peak heat	$T_P$ 260°C	10 sec. MAX

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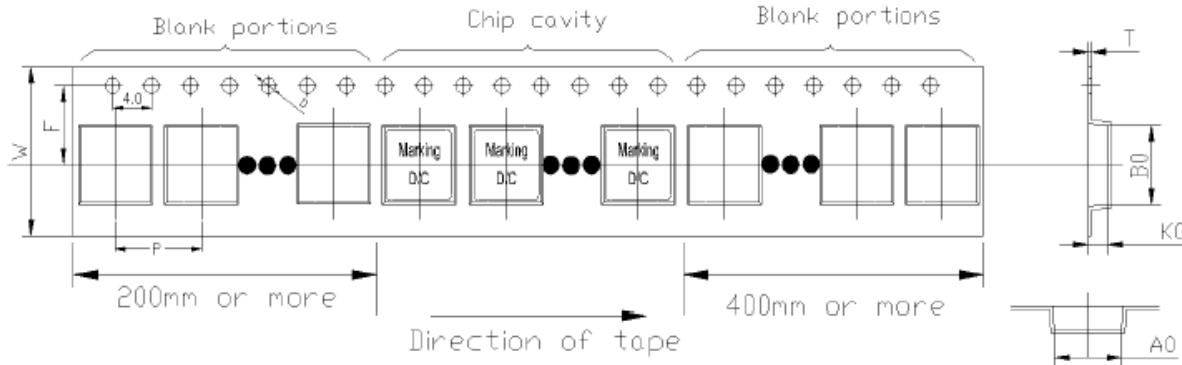
Check Inventory



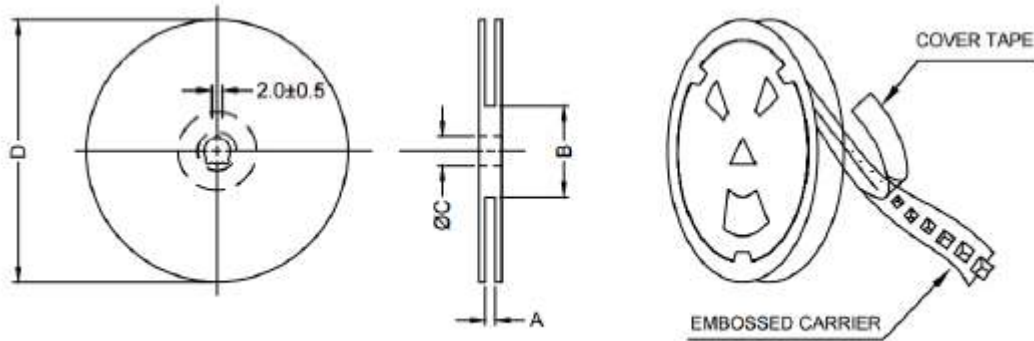
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## Packaging

**Tape & Reel: 500 pcs/reel**



W	F	P	D	A <sub>0</sub>	B <sub>0</sub>	T	K <sub>0</sub>
24.0 ± 0.3	11.5 ± 0.1	16.0 ± 0.1	1.5 ± 0.1	12.4 ± 0.1	11.5 ± 0.1	0.35 ± 0.05	6.3 ± 0.1



A	B	C	D
24.4 +2/-0	100 ± 2	13.0 +0.5/-0.2	330

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