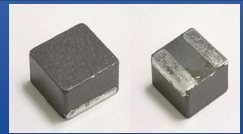


# Molded SMD Power Inductor



ASPI-F6060

Request Samples



Check Inventory



6.6 x 6.4 x 6.1 mm  
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	$\mu$ H	%	m $\Omega$		A	A
Symbol	L	M	DCR		Isat	Irms
ASPI-F6060-R33M-T	0.33	20	2.20	1.98	30.0	31.8
ASPI-F6060-R56M-T	0.56	20	2.90	2.60	23.0	27.7
ASPI-F6060-R82M-T	0.82	20	3.33	3.03	20.0	25.7
ASPI-F6060-1R0M-T	1.0	20	4.07	3.70	20.0	23.2
ASPI-F6060-1R5M-T	1.5	20	4.71	4.28	19.0	21.6
ASPI-F6060-2R2M-T	2.2	20	6.70	6.10	16.0	18.1
ASPI-F6060-2R7M-T	2.7	20	7.63	6.94	13.8	17.0
ASPI-F6060-3R3M-T	3.3	20	8.69	7.90	12.6	15.3
ASPI-F6060-4R7M-T	4.7	20	15.02	13.65	11.4	12.1
ASPI-F6060-6R8M-T	6.8	20	22.90	20.82	7.9	9.8
ASPI-F6060-8R2M-T	8.2	20	24.98	22.71	7.6	9.4
ASPI-F6060-100M-T	10.0	20	28.71	26.10	6.9	8.4
ASPI-F6060-120M-T	12.0	20	40.33	33.66	5.8	7.4

## Test Conditions

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

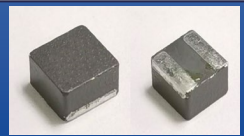
**Irms:** DC current that causes the temperature rise ( $\Delta T$ , approximate 40 °C) from 25°C ambient.

**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-F6060 Series is **RoHS Compliant and Pb free**

# Molded SMD Power Inductor



**ASPI-F6060**

Request Samples

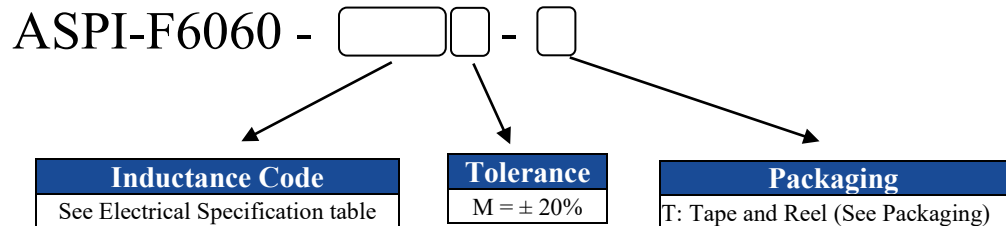


Check Inventory

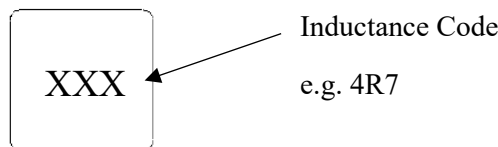


6.6 x 6.4 x 6.1 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Part Identification

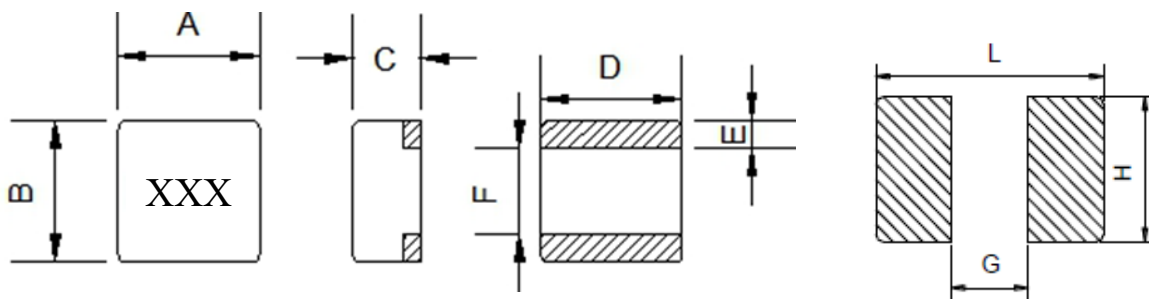


## Marking



Marking Method = Ink Marking

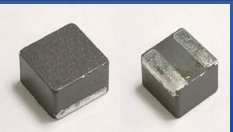
## Mechanical Specifications



Series	A	B	C	D	E	F	G	H	L
ASPI-F6060	6.6 ± 0.3	6.4 ± 0.3	6.1 Max	6.6 ± 0.3	2.0 ± 0.3	2.4 ± 0.3	2.2 Ref.	7.0 Ref.	6.8 Ref.

Dimensions: mm

# Molded SMD Power Inductor



**ASPI-F6060**

Request Samples

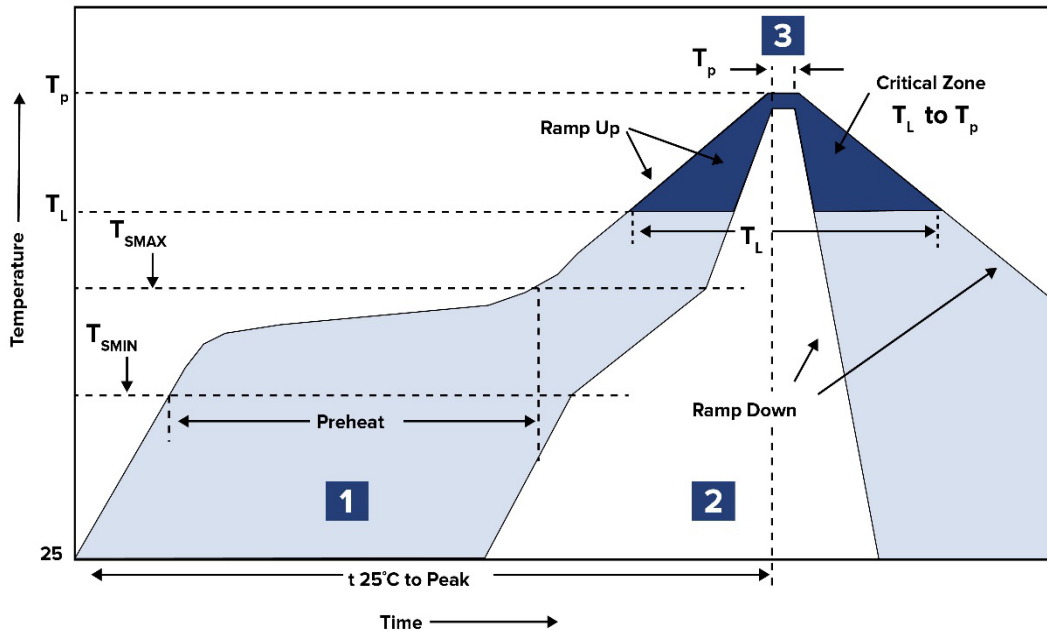


Check Inventory



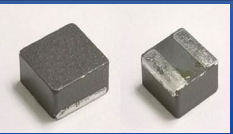
6.6 x 6.4 x 6.1 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Reflow Profile



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

# Molded SMD Power Inductor



**ASPI-F6060**

Request Samples



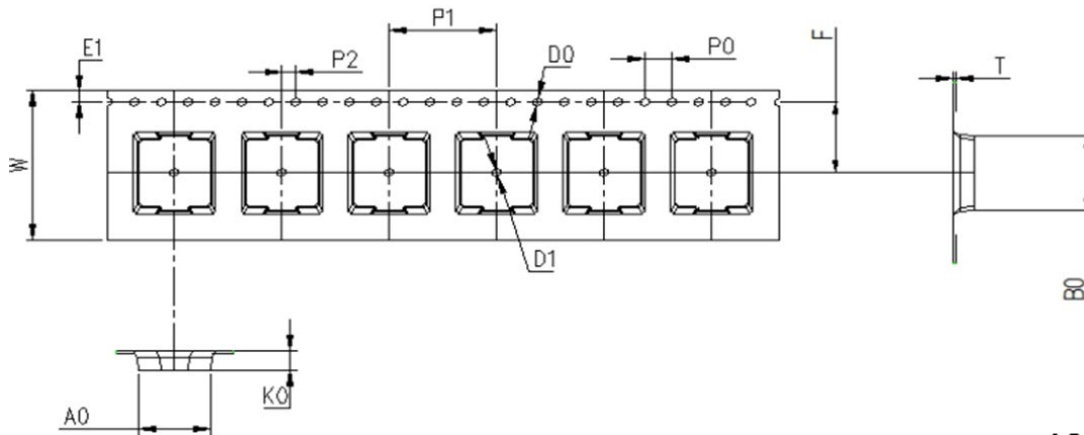
Check Inventory



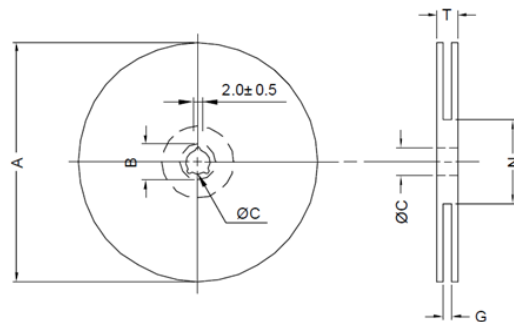
**6.6 x 6.4 x 6.1 mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 1**

## Packaging

**Tape & Reel: 750 pcs/reel**



A0	B0	K0	P1	P2	W	F	T	D0
6.9±0.1	8.0±0.1	6.30±0.1	12.00±0.1	2.0±0.1	16.00±0.2	7.50±0.1	0.4±0.1	1.50±0.1



A	C	G	N	T
330.0 ± 2.0	13.0±0.5	16.4±1.0	100.0 ± 1.0	22.4 Max

Dimensions: mm

**ATTENTION:** Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669  
 Phone: 512-371-6159 | Fax: 512-351-8858  
 For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

**REVISION: IR 04-25-23**

ABRACON IS  
 ISO9001-2015  
 CERTIFIED