

Molded SMD Power Inductor



ASPI-F6060

Request Samples



Check Inventory



6.6 x 6.4 x 5.8 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
- DC-DC converters and VRMs
- 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	
	100KHz/0.1V		Max	Typ.	Max.	Typ.	Max.	Typ.
Units	μ H	%	m Ω		A		A	
Symbol	L	M	DCR		Isat		Irms	
ASPI-F6060-1R0M-T	1.0	20	4.4	3.89	19	24	16	21
ASPI-F6060-1R5M-T	1.5	20	6.1	5.39	15	20	13.5	17.5
ASPI-F6060-2R2M-T	2.2	20	8.1	7.16	12.5	16	11	14
ASPI-F6060-3R3M-T	3.3	20	12.3	10.88	11	13	9	12
ASPI-F6060-4R7M-T	4.7	20	14.4	13.1	9.3	10.5	8.5	11
ASPI-F6060-5R6M-T	5.6	20	15.9	14.46	8.7	9.9	7.6	10
ASPI-F6060-6R8M-T	6.8	20	20.8	18.9	8.1	9.2	7	9
ASPI-F6060-8R2M-T	8.2	20	26.4	23.3	8	8.4	6	8
ASPI-F6060-100M-T	10.0	20	29.82	26.5	6.8	7.6	5	7
ASPI-F6060-150M-T	15	20	43.75	38.7	5	5.8	4.5	6
ASPI-F6060-220M-T	22	20	60.63	53.6	4.8	5.6	3.8	5

Test Conditions

Isat: DC current at which the inductance drops 35% from its initial value.

Irms: DC current that causes the temperature rise (ΔT , approximate 40 °C) from 20°C ambient.

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

Storage Condition: -55°C ~ +125°C (on board), -10°C ~ +40°C (with packaging) and R.H. 70 max.

Voltage Rating: 40VDC (Max)

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

For saturation and temperature rise graphs, please visit [Abracon | Power Inductor Performance Analyzer \(PIPA\)](#).

Molded SMD Power Inductor



ASPI-F6060

Request Samples

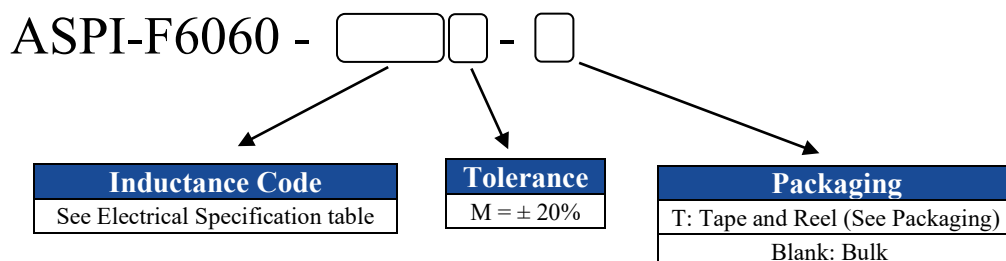


Check Inventory



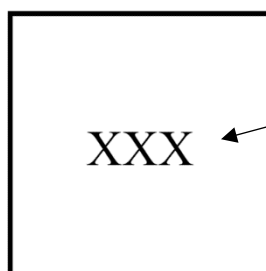
6.6 x 6.4 x 5.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Part Identification



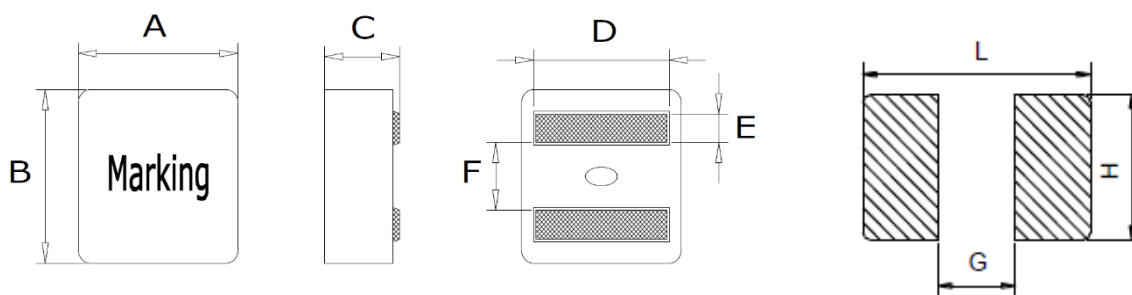
Marking

Marking Method = Ink Marking



Inductance Code
e.g. 4R7

Mechanical Specifications



Series	A	B	C	D	E	F	G	H	L
ASPI-F6060	6.6 \pm 0.2	6.4 \pm 0.2	5.8 \pm 0.2	5.4 \pm 0.3	1.5 \pm 0.3	2.6 \pm 0.3	2.5 Typ.	5.6 Typ.	5.6 Ref.

Dimensions: mm

Molded SMD Power Inductor



ASPI-F6060

Request Samples

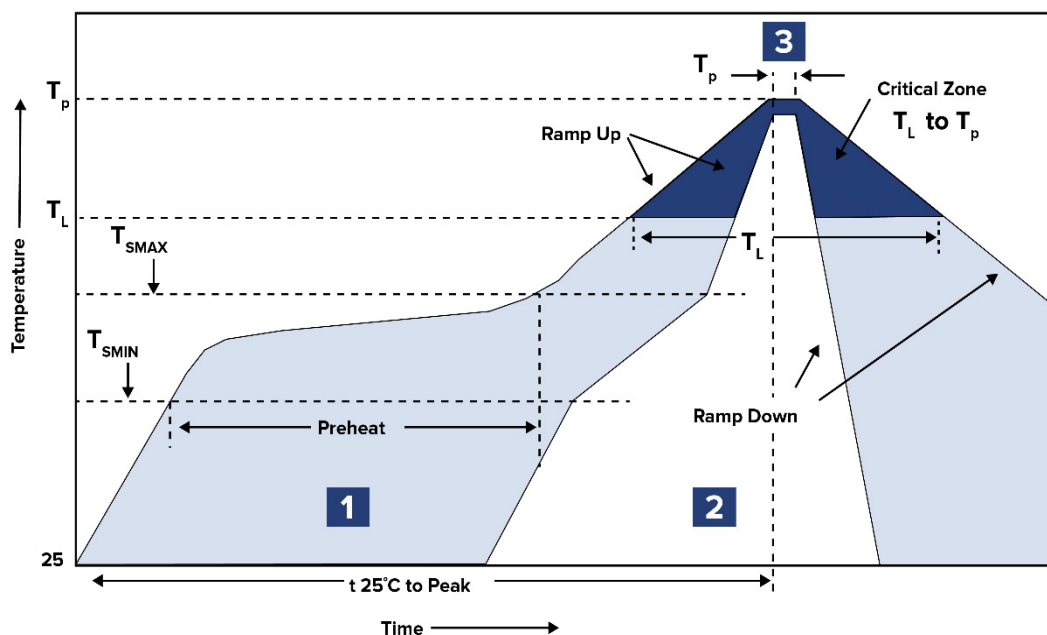


Check Inventory



6.6 x 6.4 x 5.8 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	60 ~ 120 sec.
2	Reflow	T_L 217°C	60 ~ 90 sec.
3	Peak heat	T_p 260°C	10 sec. MAX

Ref. paste: Sn/3.0Ag/0.5Cu (Pb-free assembly)

Ramp up rate: 3°C/Sec

Ramp down rate: 6°C/Sec

Molded SMD Power Inductor



ASPI-F6060

Request Samples



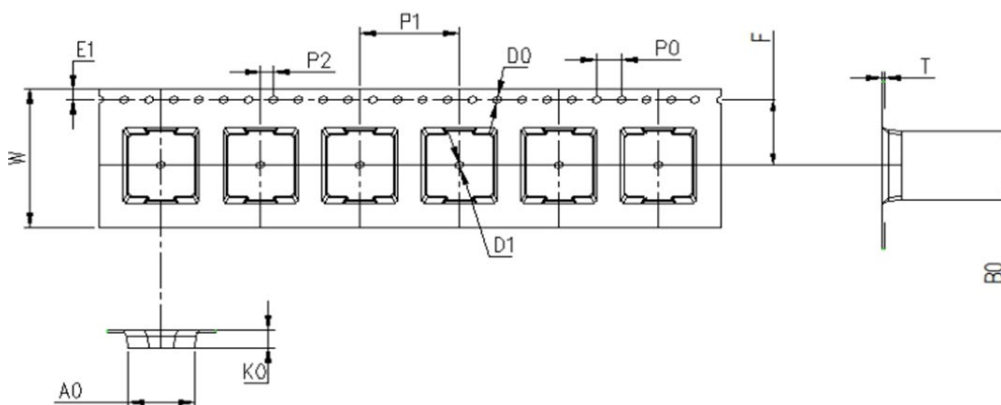
Check Inventory



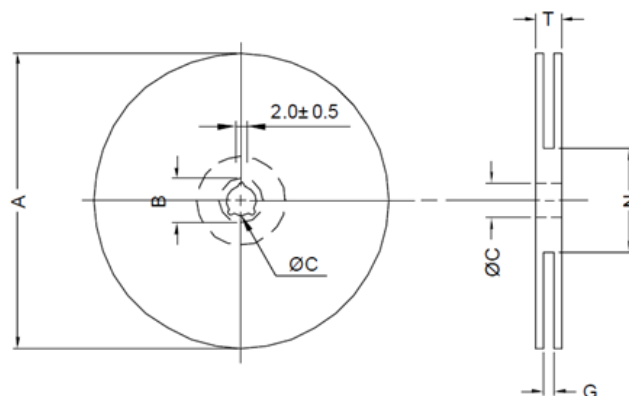
6.6 x 6.4 x 5.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Tape & Reel: 750 pcs/reel



A0	B0	K0	P1	P2	W	F	T
7	6.8	6.8	12	2	16	7.5	0.4



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

REVISION: A 07-02-24

ABRACON IS
 ISO9001-2015
 CERTIFIED