



# SMD INDUCTORS B6012 SERIES

## FEATURES:

- Flame retardant encapsulant (UL 94 V-0)
- Completely encapsulated winding provides superior environmental protection and moisture resistance
- High current unit in surface mount package printed with model, inductance value and date code
- Compatible with infrared or conventional reflow soldering methods
- Pick and place compatible

## COMMON APPLICATIONS:

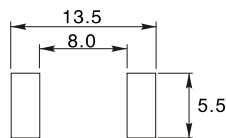
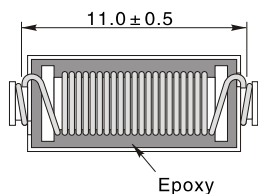
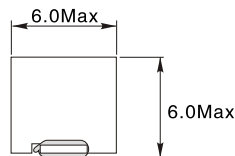
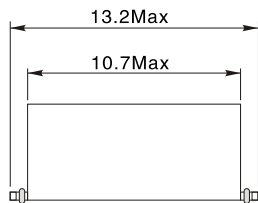
- Excellent power line noise filters
- Filters for switching regulated power supplies, DC/DC converters
- SCR and triac controls
- RFI suppression

## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) @0A <sub>dc</sub>	Heat rating current DC Amps I <sub>rms</sub> (A)	Saturation current DC Amps I <sub>sat</sub> (A)	DCR Max. (Ω).	Part Number	Inductance L0(μH) @0A <sub>dc</sub>	Heat rating current DC Amps I <sub>rms</sub> (A)	Saturation current DC Amps I <sub>sat</sub> (A)	DCR Max. (Ω).
B6012-1R0M	1.0	1.8	16.2	0.012	B6012-101K	100.0	0.2	1.6	0.961
B6012-1R2M	1.2	1.8	15.3	0.013	B6012-121K	120.0	0.2	1.4	1.03
B6012-1R5M	1.5	1.8	14.4	0.014	B6012-151K	150.0	0.2	1.4	1.08
B6012-1R8M	1.8	1.8	9.0	0.015	B6012-181K	180.0	0.2	1.3	1.19
B6012-2R2M	2.2	1.4	8.6	0.022	B6012-221K	220.0	0.2	1.2	1.25
B6012-2R7M	2.7	1.2	8.1	0.032	B6012-271K	270.0	0.15	1.1	1.56
B6012-2R2M	3.3	1.2	7.7	0.034	B6012-331K	330.0	0.15	1.0	1.80
B6012-3R9M	3.9	0.7	6.5	0.065	B6012-391K	390.0	0.12	0.9	2.62
B6012-4R7M	4.7	.7	5.5	0.068	B6012-471K	470.0	0.12	0.81	2.88
B6012-5R6M	5.6	0.7	5.2	0.073	B6012-561K	560.0	0.1	0.72	3.83
B6012-6R8M	6.8	0.7	5.0	0.077	B6012-681K	680.0	0.1	0.58	4.20
B6012-8R2M	8.2	0.7	4.8	0.081	B6012-821K	820.0	0.1	0.54	4.53
B6012-100M	10.0	0.7	4.7	0.103	B6012-102K	1000.0	0.1	0.52	4.79
B6012-120K	12.0	0.7	4.4	0.107	B6012-122K	1200.0	0.075	0.49	6.34
B6012-150K	15.0	0.7	4.1	0.112	B6012-152K	1500.0	0.075	0.46	7.30
B6012-180K	18.0	0.7	3.8	0.125	B6012-182K	1800.0	0.06	0.43	11.22
B6012-220K	22.0	0.6	3.0	0.167	B6012-222K	2200.0	0.06	0.38	12.41
B6012-270K	27.0	0.5	2.6	0.218	B6012-272K	2700.0	0.06	0.28	16.10
B6012-330K	33.0	0.3	2.4	0.308	B6012-332K	3300.0	0.06	0.26	18.35
B6012-390K	39.0	0.3	2.3	0.340	B6012-392K	3900.0	0.06	0.25	24.82
B6012-470K	47.0	0.3	2.1	0.370	B6012-472K	4700.0	0.03	0.23	25.48
B6012-560K	56.0	0.3	1.9	0.409	B6012-562K	5600.0	0.03	0.21	31.83
B6012-680K	68.0	0.3	1.8	0.449	B6012-682K	6800.0	0.03	0.19	36.90
B6012-820K	82.0	0.3	1.7	0.488					

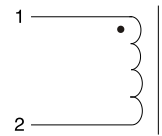
## PHYSICAL CHARACTERISTICS:

DIMENSIONS(MM)



LAND PATTERNS

## WINDING:



- Testing: (Equivalent acceptable)  
Inductance: HP4284A, 10KHz / 0.1V<sub>dc</sub>@25°C  
RDC:QuadTech 1880 Milliohm meter
- Inductance Tolerance: ± 20%(1uH to 10uH)  
± 10%(12uH to 6.8mH)
- I<sub>sat</sub> Max:Determined when superimposed DC current is decreased 5% against its initial value
- Operating temperature: -25°C to +105°C(Including temp. rise 40°C)
- Storage Temperature: -40°C to +85°C
- Resistance to soldering heat:260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance