SMD INDUCTORS

B6010 SERIES

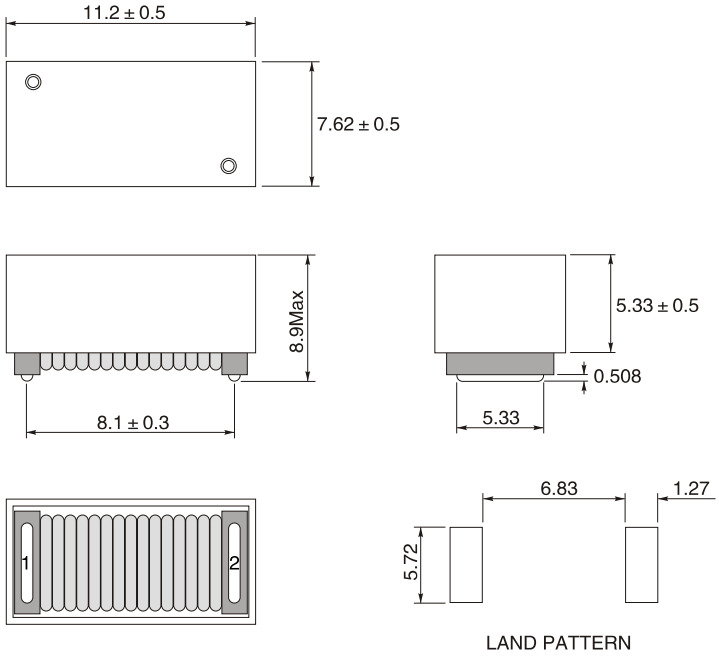


FEATURES:

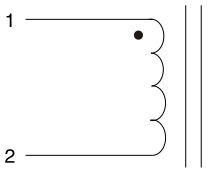
- Over 45 standard inductive values covering a range of 1.0 μH to 6.8 mH with rated currents of up to 1.8 A
- Uses a nonconductive, high–volume resistivity, low–loss ferrite material
- Storage temperature range:–55℃ to +130℃
- Operating temperature range:–40℃ to +130℃
- Square –shaped encapsulation cover and flat top make this component highly suitable for automated pick and place assembly

PHYSICAL CHARACTERISTICS:

Dimensions(mm)



WINDING:



ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μH) @1KHz	DCR Max. (Ω).	AC Rated current(A)	DC Saturation current(A) 5%L drop	DC Saturation current(A) 10%L drop
B6010–1R0M	1.0	0.012	1.8	16.2	18.2
B6010–1R2M	1.2	0.013	1.8	15.3	17.1
B6010–1R5M	1.5	0.014	1.8	14.4	16.2
B6010–1R8M	1.8	0.015	1.8	9.0	13.5
B6010–2R2M	2.2	0.022	1.4	8.6	10.8
B6010–2R7M	2.7	0.032	1.2	8.1	9.9
B6010–3R3M	3.3	0.034	1.2	7.7	8.1
B6010–3R9M	3.9	0.065	0.70	6.5	7.2
B6010–4R7M	4.7	0.068	0.70	5.5	6.5
B6010–5R6M	5.6	0.073	0.70	5.2	6.2
B6010–6R8M	6.8	0.077	0.70	5.0	6.0
B6010–8R2M	8.2	0.081	0.70	4.8	5.9

Tolerance for values from 1uH to 10uH are ± 20%, All other values are ± 10%
Tolerance code: M= ± 20%, K= ± 10%

ELECTRICAL CHARACTERISTICS:@25℃

Part Number	Inductance (μH) @1KHz	DCR Max. (Ω).	AC Rated current(A)	DC Saturation current(A) 5%L drop	DC Saturation current(A) 10%L drop
B6010–100M	10.0	0.103	0.70	4.7	5.4
B6010–120K	12.0	0.107	0.70	4.4	4.8
B6010–150K	15.0	0.112	0.70	4.1	4.5
B6010–180K	18.0	0.125	0.70	3.8	4.3
B6010–220K	22.0	0.167	0.60	3.0	3.2
B6010–270K	27.0	0.218	0.50	2.6	2.9
B6010–330K	33.0	0.308	0.30	2.4	2.7
B6010–390K	39.0	0.340	0.30	2.3	2.5
B6010–470K	47.0	0.370	0.30	2.1	2.3
B6010–560	56.0	0.409	0.30	1.9	2.2
B6010–680K	68.0	0.449	0.30	1.8	2.0
B6010–820K	82.0	0.488	0.30	1.7	1.9
B6010–101K	100.0	0.961	0.20	1.6	1.8
B6010–121K	120.0	1.03	0.20	1.4	1.7
B6010–151K	150.0	1.08	0.20	1.4	1.6
B6010–181K	180.0	1.19	0.20	1.3	1.4
B6010–221K	220.0	1.25	0.20	1.2	1.4
B6010–271K	270.0	1.56	0.15	1.1	1.3
B6010–331K	330.0	1.80	0.15	1.0	1.2
B6010–391K	390.0	2.62	0.12	0.9	1.1
B6010–471K	470.0	2.88	0.12	0.81	0.90
B6010–561K	560.0	3.83	0.10	0.72	0.81
B6010–681K	680.0	4.20	0.10	0.58	0.70
B6010–821K	820.0	4.53	0.10	0.54	0.63
B6010–102K	1000.0	4.79	0.10	0.52	0.61
B6010–122K	1200.0	6.34	0.075	0.49	0.56
B6010–152K	1500.0	7.30	0.075	0.46	0.49
B6010–182K	1800.0	11.22	0.06	0.43	0.47
B6010–222K	2200.0	12.41	0.06	0.38	0.43
B6010–272K	2700.0	16.10	0.06	0.28	0.31
B6010–332K	3300.0	18.35	0.06	0.26	0.29
B6010–392K	3900.0	24.82	0.06	0.25	0.28
B6010–472K	4700.0	25.48	0.03	0.23	0.26
B6010–562K	5600.0	31.83	0.03	0.21	0.23
B6010–682K	6800.0	36.90	0.03	0.19	0.21

Tolerance for values trom 1uH to 10uH are ± 20%, All other values are ± 10%
Tolerance code: M= ± 20%, K= ± 10%

Note:

- Testing: (Equivalent acceptable)
  Inductance..... HP4284A, 1.0KHz / 0.1Vdc@25℃
  RDC.....QuadTech 1880 Milliohmmeter
- Operating temperature.....–40℃ to +130℃
- Storage Temperature.....–55℃ to +130℃
- Packaging.....Avilable in bulk and/or 450 piece tape and reel.



SMD INDUCTORS

B6011 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 APPLCATIONS:

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

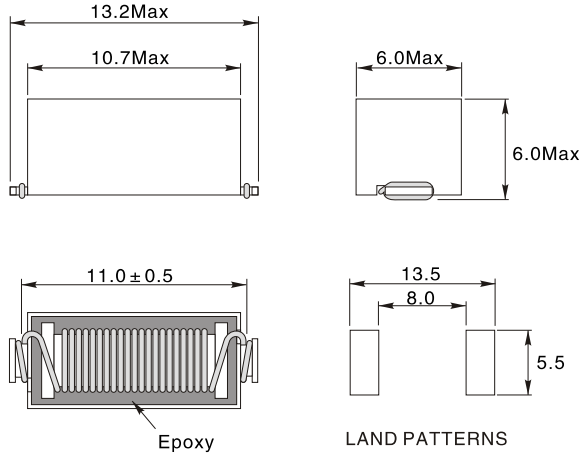
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω).
B6011–1R0Y	1.0	8.6	4.1	0.013
B6011–1R2Y	1.2	7.6	3.8	0.018
B6011–1R5Y	1.5	6.9	3.5	0.02
B6011–1R8Y	1.8	6.5	3.2	0.021
B6011–2R2Y	2.2	5.7	2.9	0.029
B6011–2R7Y	2.7	5.1	2.6	0.034
B6011–3R3Y	3.3	4.6	2.4	0.038
B6011–3R9Y	3.9	4.3	2.2	0.042
B6011–4R7Y	4.7	4.0	2.0	0.047
B6011–5R6Y	5.6	3.8	1.9	0.051
B6011–6R8Y	6.8	3.5	1.7	0.058
B6011–8R2Y	8.2	3.3	1.5	0.063
B6011–100Y	10.0	3.1	1.4	0.071
B6011–120Y	12.0	2.7	1.3	0.079
B6011–150Y	15.0	2.3	1.2	0.089
B6011–180Y	18.0	1.9	1.1	0.119
B6011–220Y	22.0	1.7	1.02	0.152
B6011–270Y	27.0	1.6	0.95	0.179
B6011–330Y	33.0	1.3	0.88	0.222

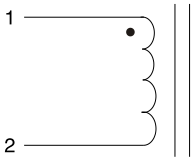
Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω).
B6011–390Y	39.0	1.19	0.8	0.315
B6011–470Y	47.0	1.07	0.74	0.362
B6011–560Y	56.0	0.95	0.68	0.397
B6011–680Y	68.0	0.87	0.62	0.446
B6011–820Y	82.0	0.8	0.56	0.604
B6011–101Y	100.0	0.73	0.5	0.672
B6011–121Y	120.0	0.66	0.45	0.735
B6011–151Y	150.0	0.58	0.4	0.998
B6011–181Y	180.0	0.5	0.35	1.37
B6011–221Y	220.0	0.46	0.32	1.58
B6011–271Y	270.0	0.41	0.3	1.77
B6011–331Y	330.0	0.37	0.28	2.51
B6011–391Y	390.0	0.34	0.26	2.73
B6011–471Y	470.0	0.32	0.24	3.36
B6011–561Y	560.0	0.3	0.23	3.75
B6011–681Y	680.0	0.28	0.2	4.31
B6011–821Y	820.0	0.26	0.17	6.04
B6011–102Y	1000.0	0.24	0.15	6.9
B6011–152Y	1500.0	0.075	0.46	7.3

PHYSICAL CHARACTERISTICS:

DIMENSIONS(MM)



WINDING:



- Testing: (Equivalent acceptable)
  Inductance: HP4284A, 1.0KHz / 1Vdc@25℃
  RDC:QuadTech 1880 Milliohmmeter
- Inductance Tolerance: ± 15 %
- Isat Max:Determined when superimposed DC current is decreased 5% against its initial value
- Operating temperature: –25℃ to +105℃(Including temp. rise 40℃)
- Storage Temperature: –40℃ to +85℃
- Resistance to soldering heat:260℃ for 10 seconds
- Solvent resistance: Conforms to MIL–STD–202E
- Marking: Inductance & Tolerance



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 APPLCATIONS:

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

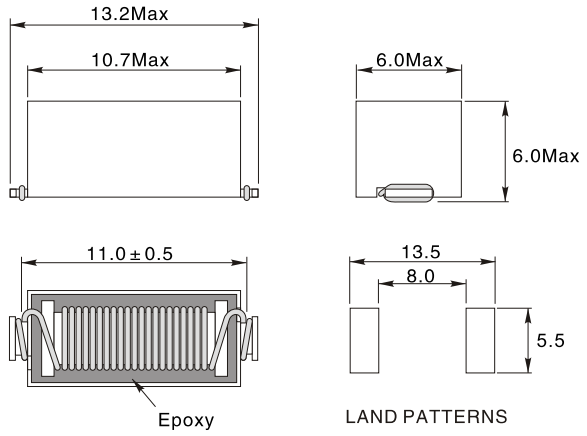
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω).
B6012–1R0M	1.0	1.8	16.2	0.012
B6012–1R2M	1.2	1.8	15.3	0.013
B6012–1R5M	1.5	1.8	14.4	0.014
B6012–1R8M	1.8	1.8	9.0	0.015
B6012–2R2M	2.2	1.4	8.6	0.022
B6012–2R7M	2.7	1.2	8.1	0.032
B6012–2R2M	3.3	1.2	7.7	0.034
B6012–3R9M	3.9	0.7	6.5	0.065
B6012–4R7M	4.7	.7	5.5	0.068
B6012–5R6M	5.6	0.7	5.2	0.073
B6012–6R8M	6.8	0.7	5.0	0.077
B6012–8R2M	8.2	0.7	4.8	0.081
B6012–100M	10.0	0.7	4.7	0.103
B6012–120K	12.0	0.7	4.4	0.107
B6012–150K	15.0	0.7	4.1	0.112
B6012–180K	18.0	0.7	3.8	0.125
B6012–220K	22.0	0.6	3.0	0.167
B6012–270K	27.0	0.5	2.6	0.218
B6012–330K	33.0	0.3	2.4	0.308
B6012–390K	39.0	0.3	2.3	0.340
B6012–470K	47.0	0.3	2.1	0.370
B6012–560K	56.0	0.3	1.9	0.409
B6012–680K	68.0	0.3	1.8	0.449
B6012–820K	82.0	0.3	1.7	0.488

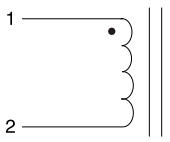
Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω).
B6012–101K	100.0	0.2	1.6	0.961
B6012–121K	120.0	0.2	1.4	1.03
B6012–151K	150.0	0.2	1.4	1.08
B6012–181K	180.0	0.2	1.3	1.19
B6012–221K	220.0	0.2	1.2	1.25
B6012–271K	270.0	0.15	1.1	1.56
B6012–331K	330.0	0.15	1.0	1.80
B6012–391K	390.0	0.12	0.9	2.62
B6012–471K	470.0	0.12	0.81	2.88
B6012–561K	560.0	0.1	0.72	3.83
B6012–681K	680.0	0.1	0.58	4.20
B6012–821K	820.0	0.1	0.54	4.53
B6012–102K	1000.0	0.1	0.52	4.79
B6012–122K	1200.0	0.075	0.49	6.34
B6012–152K	1500.0	0.075	0.46	7.30
B6012–182K	1800.0	0.06	0.43	11.22
B6012–222K	2200.0	0.06	0.38	12.41
B6012–272K	2700.0	0.06	0.28	16.10
B6012–332K	3300.0	0.06	0.26	18.35
B6012–392K	3900.0	0.06	0.25	24.82
B6012–472K	4700.0	0.03	0.23	25.48
B6012–562K	5600.0	0.03	0.21	31.83
B6012–682K	6800.0	0.03	0.19	36.90

PHYSICAL CHARACTERISTICS:

DIMENSIONS(MM)



WINDING:



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



SMD INDUCTORS

B8020 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 APPLCATIONS:

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

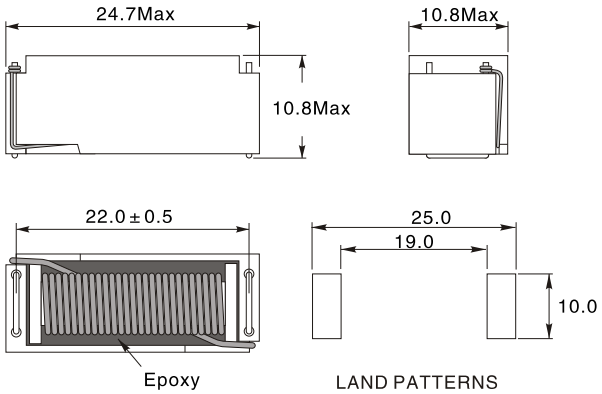
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω).
B8020–3R9K	3.9	4.0	15.5	.007
B8020–4R7K	4.7	4.0	13.9	.008
B8020–5R6K	5.6	4.0	12.6	.011
B8020–6R8K	6.8	4.0	11.6	.011
B8020–8R2K	8.2	4.0	9.89	.013
B8020–100K	10	4.0	8.70	.017
B8020–120K	12	4.0	8.21	.019
B8020–150K	15	4.0	7.34	.022
B8020–180K	18	4.0	6.64	.023
B8020–220K	22	4.0	6.07	.026
B8020–270K	27	4.0	5.36	.027
B8020–330K	33	4.0	4.82	.032
B8020–390K	39	4.0	4.36	.033
B8020–470K	47	4.0	3.98	.035
B8020–560K	56	3.2	3.66	.037
B8020–680K	68	2.5	3.31	.047
B8020–820K	82	2.0	3.10	.060
B8020–101K	100	1.6	2.79	.090
B8020–121K	120	1.6	5.54	.113
B8020–151K	150	1.6	2.22	.129
B8020–181K	180	1.6	1.98	.150
B8020–221K	220	1.6	1.89	.162
B8020–271K	270	1.6	1.63	.208
B8020–331K	330	1.6	1.51	.212
B8020–391K	390	1.6	1.39	.281
B8020–471K	470	1.2	1.24	.380
B8020–561K	560	1.0	1.17	.420

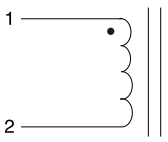
Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω).
B8020–681K	680	1.0	1.05	.548
B8020–821K	820	0.8	.97	.655
B8020–102K	1000	0.8	.87	.844
B8020–122K	1200	0.6	.79	1.04
B8020–152K	1500	0.6	.70	1.18
B8020–182K	1800	0.6	.64	1.56
B8020–222K	2200	0.5	.58	2.00
B8020–272K	2700	0.4	.53	2.06
B8020–332K	3300	0.4	.47	2.53
B8020–392K	3900	0.4	.43	2.75
B8020–472K	4700	0.4	.39	3.19
B8020–562K	5600	0.315	.359	3.92
B8020–682K	6800	0.250	.322	5.69
B8020–822K	8200	0.250	.293	6.32
B8020–103K	10000	0.250	.266	7.30
B8020–123K	12000	0.200	.241	9.21
B8020–153K	15000	0.200	.214	10.50
B8020–183K	18000	0.158	.198	14.80
B8020–223K	22000	0.125	.180	21.8
B8020–273K	27000	0.125	.162	22.7
B8020–333K	33000	0.125	.146	25.7
B8020–393K	39000	0.100	.135	31.8
B8020–473K	47000	0.100	.122	36.1
B8020–563K	56000	0.100	.112	40.9
B8020–683K	68000	0.082	.101	57.3
B8020–823K	82000	0.065	.090	79.3
B8020–104K	100000	0.065	.081	89.7

PHYSICAL CHARACTERISTICS:

DIMENSIONS(MM)



WINDING:



- Testing: (Equivalent acceptable)
  Inductance: HP4284A, 1.0KHz / 0.1Vdc@25℃
  RDC:QuadTech 1880 Milliohmmeter
- Inductance Tolerance: ±10%
- Isat Max:Determined when superimposed DC current is decreased 10% against its initial value
- Operating temperature: –25℃ to +105℃(Including temp. rise 40℃)
- Storage Temperature: –40℃ to +85℃
- Resistance to soldering heat:260℃ for 10 seconds
- Solvent resistance: Conforms to MIL–STD–202E
- Marking: Inductance & Tolerance