

Miniature Button Inductors



- Operating Temperature Range -40°C to +100°C
- Insulation System Class B, 130°C

Specifications

Part Number	Inductance (1) μH ±20%	DC Resistance (2) Ω Max.	Rated Current (3) Amps	Terminals (4)	Figure
HM68-102R2	2.2	0.21	1.25	1 - 3	1
HM68-103R3	3.3	0.24	1.05	1 - 3	1
HM68-104R7	4.7	0.29	0.92	1 - 3	1
HM68-106R8	6.8	0.44	0.74	1 - 3	1
HM68-10100	10	0.62	0.62	1 - 3	1
HM68-10150	15	0.91	0.47	1 - 3	1
HM68-10220	22	1.27	0.39	1 - 3	1
HM68-10330	33	1.79	0.32	1 - 3	1
HM68-10470	47	2.74	0.27	1 - 3	1
HM68-202R2	2.2	0.21	1.41	1 - 3	1
HM68-203R3	3.3	0.24	1.15	1 - 3	1
HM68-204R7	4.7	0.30	0.90	1 - 3	1
HM68-206R8	6.8	0.43	0.82	1 - 3	1
HM68-20100	10	0.52	0.64	1 - 3	1
HM68-20150	15	0.82	0.60	1 - 3	1
HM68-20220	22	1.18	0.46	1 - 3	1
HM68-20330	33	1.53	0.39	1 - 3	1
HM68-20470	47	2.27	0.30	1 - 3	1
HM68-302R2	2.2	0.15	1.40	1 - 4	2
HM68-303R3	3.3	0.20	1.13	1 - 4	2
HM68-304R7	4.7	0.27	0.89	1 - 4	2
HM68-306R8	6.8	0.38	0.72	1 - 4	2
HM68-30100	10	0.63	0.58	1 - 4	2
HM68-30150	15	0.82	0.48	1 - 4	2
HM68-30220	22	1.05	0.42	1 - 4	2
HM68-30330	33	1.50	0.32	1 - 4	2
HM68-30470	47	2.47	0.25	1 - 4	2
HM68-402R2	2.2	0.16	1.62	1 - 4	2
HM68-403R3	3.3	0.19	1.48	1 - 4	2
HM68-404R7	4.7	0.22	1.15	1 - 4	2
HM68-406R8	6.8	0.27	0.93	1 - 4	2
HM68-40100	10	0.38	0.74	1 - 4	2
HM68-40150	15	0.62	0.62	1 - 4	2
HM68-40220	22	0.91	0.50	1 - 4	2
HM68-40330	33	1.32	0.38	1 - 4	2
HM68-40470	47	1.75	0.33	1 - 4	2
HM68-503R3	3.3	0.081	1.25	(1,4) - (2,3)	3
HM68-504R7	4.7	0.106	1.20	(1,4) - (2,3)	3
HM68-506R8	6.8	0.144	0.90	(1,4) - (2,3)	3
HM68-50100	10	0.187	0.85	(1,4) - (2,3)	3
HM68-50150	15	0.30	0.57	(1,4) - (2,3)	3
HM68-50220	22	0.431	0.54	1 - 2	4
HM68-50330	33	0.637	0.38	1 - 2	4
HM68-50470	47	0.875	0.35	1 - 2	4

Specifications (Cont'd)

- Notes:
- (1) Inductance is measured at 100 kHz, 1.0 Vrms, 0 ADC.
 - (2) DC resistance is measured at 20°C.
 - (3) Rated current is the approximate current at which inductance will be decreased by 35% from its initial (zero DC) value or the current at which $\Delta T = 40^\circ\text{C}$, whichever is lower.
 - (4) Short pin 1 to pin 4, & pin 2 to pin 3 when HM68-50XXX (Inductance below 22 μH) model is in use.

Outline Dimensions (Inch/mm)

Figure 1 - Nonshielded

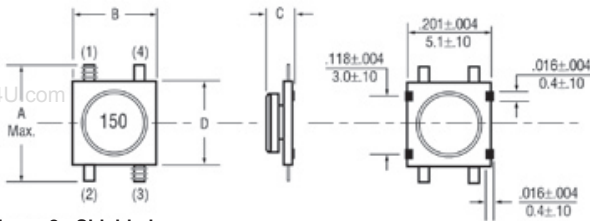


Figure 3 - Nonshielded

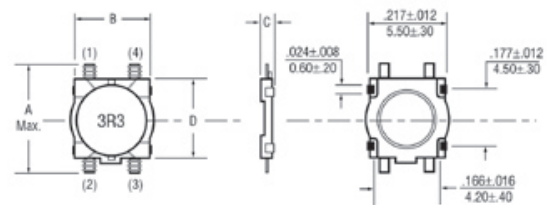


Figure 2 - Shielded

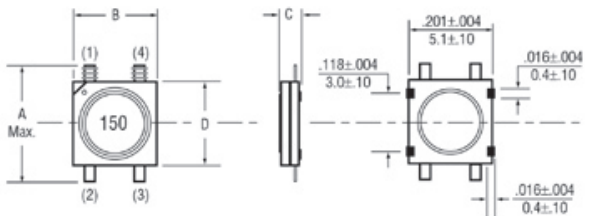
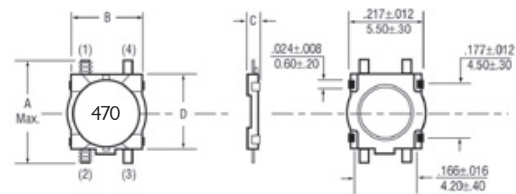


Figure 4 - Nonshielded



Recommended Solder Pad Layout

Figure 1 & 2

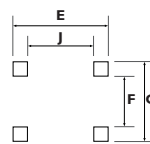
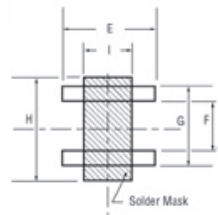


Figure 3 & 4



Case Size	Figure	A	B	C	D	E	F	G	H	I	J
10	1	.252 6.40	.197±.012 5.00±0.3	.039±.004 1.00±.10	.197±.004 5.00±.10	.224 5.70	.079 2.00	.157 4.00	-	-	.146 3.7
20	1	.252 6.40	.197±.012 5.00±0.3	.039±.004 1.20±.10	.197±.004 5.00±.10	.224 5.70	.079 2.00	.157 4.00	-	-	.146 3.7
30	2	.252 6.40	.197±.012 5.00±0.3	.039±.004 1.00±.10	.197±.004 5.00±.10	.224 5.70	.079 2.00	.157 4.00	-	-	.146 3.7
40	2	.252 6.40	.197±.012 5.00±0.3	.047±.004 1.20±.10	.197±.004 5.00±.10	.224 5.70	.079 2.00	.157 4.00	-	-	.146 3.7
50	3 & 4	.291 7.40	.216±.012 5.50±0.3	.059 Max. 1.50 Max.	.236±.008 6.0±0.2	.224 5.70	.142 3.60	.252 6.40	.330 8.40	.106 2.70	-

Ordering Information

Model Series: **HM68** **50** **3R3** **LF** **TR** — Tape & 7" Reel (1000 Units/Reel)

Case Size: 10, 20 = Figure 1, Nonshielded
30, 40 = Figure 2, Shielded
50 (L<22 μH) = Figure 3, Nonshielded
50 (L≥22 μH) = Figure 4, Nonshielded

Inductance Code: LF = Lead-Free (No code used for non lead-free part)

First 2 digits are significant.
Last digit denotes the number of trailing zeros.
For values below 10 μH , "R" denotes the decimal point.