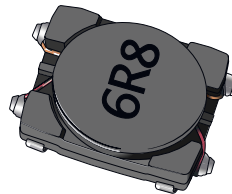


# MODEL HM68 SERIES

## Miniature Button Inductors

NEW PRODUCT



### FEATURES AND BENEFITS

- Very low profile, 1.0 mm to 1.5 mm
- 2.2  $\mu$ H to 47  $\mu$ H inductance range
- Up to 1.9 amps continuous
- Accurate dimensions for machine placement
- Compatible with vapor phase and infrared reflow
- Available in both shielded and nonshielded versions

### APPLICATIONS

- Mobile communication equipment
- Wireless and PDAs
- PCMCIA cards and disk drives
- Instrumentation
- Video Games

### ELECTRICAL / ENVIRONMENTAL

Operating Temperature Range	-25°C to +100°C
Storage Temperature Range	-40°C to +100°C
Insulation System	Class B, 130°C

Specifications subject to change without notice.  
Last update: 03/17/2003.

## SPECIFICATIONS

Part Number	Inductance (1) μH±20%	DC	Rated	Figure
		Resistance (2) Ω Max.	Current (3) Amps	
HM68-102R2	2.2	0.18	1.70	1
HM68-103R3	3.3	0.22	1.50	1
HM68-104R7	4.7	0.28	1.32	1
HM68-106R8	6.8	0.38	1.12	1
HM68-10100	10	0.61	0.90	1
HM68-10150	15	0.82	0.73	1
HM68-10220	22	1.10	0.62	1
HM68-10330	33	1.88	0.52	1
HM68-10470	47	2.34	0.42	1
HM68-202R2	2.2	0.18	1.97	1
HM68-203R3	3.3	0.22	1.82	1
HM68-204R7	4.7	0.27	1.54	1
HM68-206R8	6.8	0.37	1.31	1
HM68-20100	10	0.48	1.10	1
HM68-20150	15	0.62	0.95	1
HM68-20220	22	0.92	0.77	1
HM68-20330	33	1.41	0.60	1
HM68-20470	47	2.16	0.51	1
HM68-302R2	2.2	0.15	1.80	2
HM68-303R3	3.3	0.20	1.45	2
HM68-304R7	4.7	0.22	1.35	2
HM68-306R8	6.8	0.28	1.09	2
HM68-30100	10	0.42	0.93	2
HM68-30150	15	0.61	0.73	2
HM68-30220	22	0.78	0.65	2
HM68-30330	33	1.26	0.50	2
HM68-30470	47	1.94	0.41	2
HM68-402R2	2.2	0.16	2.30	2
HM68-403R3	3.3	0.19	1.78	2
HM68-404R7	4.7	0.22	1.68	2
HM68-406R8	6.8	0.27	1.41	2
HM68-40100	10	0.35	1.20	2
HM68-40150	15	0.46	0.98	2
HM68-40220	22	0.68	0.83	2
HM68-40330	33	0.98	0.66	2
HM68-40470	47	1.56	0.48	2
HM68-503R3	3.3	0.081	1.90	3
HM68-504R7	4.7	0.106	1.50	3
HM68-506R8	6.8	0.144	1.40	3
HM68-50100	10	0.187	1.00	3
HM68-50150	15	0.30	0.95	3
HM68-50220	22	0.431	0.80	3
HM68-50330	33	0.637	0.70	3
HM68-50470	47	0.875	0.55	3

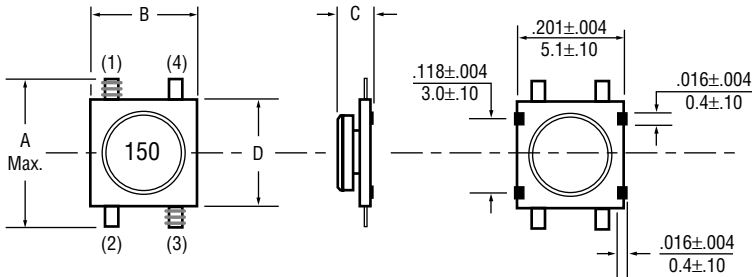
Notes: (1) Inductance measured at 100 kHz, 1.0 Vrms, 0 ADC.

(2) DC resistance measured at 20°C.

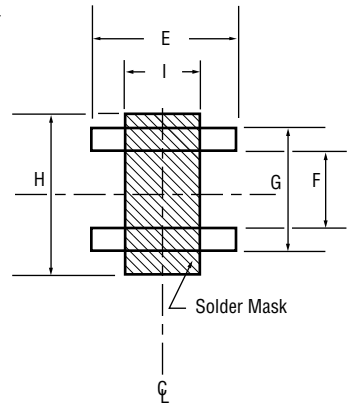
(3) Rated current is the approximate current at which inductance will be decreased by 35% from its initial (zero DC) value or the current at which  $\Delta T = 40^{\circ}\text{C}$ , whichever is lower.

**OUTLINE DIMENSIONS (Inch/mm)**

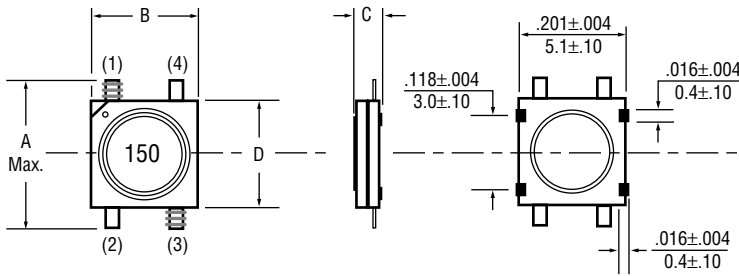
**Figure 1 - Nonshielded**



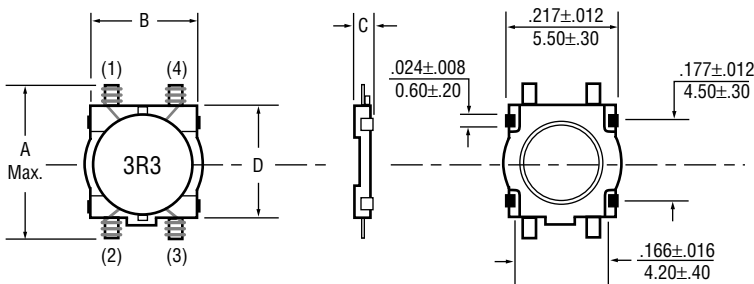
**Recommended Solder Pad Layout**



**Figure 2 - Shielded**



**Figure 3 - Nonshielded**



Case Size	Figure	A	B	C	D	E	F	G	H	I
10	1	.252	.197±.004	.039±.004	.197±.004	.224	.079	.157	.236	.106
		6.40	5.00±.10	1.00±.10	5.00±.10	5.70	2.00	4.00	6.00	2.70
20	1	.252	.197±.004	.047±.004	.197±.004	.224	.079	.157	.236	.106
		6.40	5.00±.10	1.20±.10	5.00±.10	5.70	2.00	4.00	6.00	2.70
30	2	.252	.197±.004	.039±.004	.197±.004	.224	.079	.157	.236	.106
		6.40	5.00±.10	1.00±.10	5.00±.10	5.70	2.00	4.00	6.00	2.70
40	2	.252	.197±.004	.047±.004	.197±.004	.224	.079	.157	.236	.106
		6.40	5.00±.10	1.20±.10	5.00±.10	5.70	2.00	4.00	6.00	2.70
50	3	.291	.216±.004	.059±.004	.229±.004	.220	.142	.252	.330	.106
		7.40	5.50±.10	1.50±.10	5.80±.10	5.60	3.60	6.40	8.40	2.70

## PACKAGING

**Standard:** Embossed Tape & Reel

Reel Diameter:	=	7" (117.8mm)
Capacity:	=	1,000 Units

## ORDERING INFORMATION

Model Series: HM68 50 2R2

Case Size: \_\_\_\_\_

10, 20 = Figure 1, Nonshielded  
30, 40 = Figure 2, Shielded  
50 = Figure 3, Nonshielded

Inductance Code:  
First two digits are significant.  
Last digit denotes number of trailing zeros. Values below 10 $\mu$ H "R" denotes decimal point.