

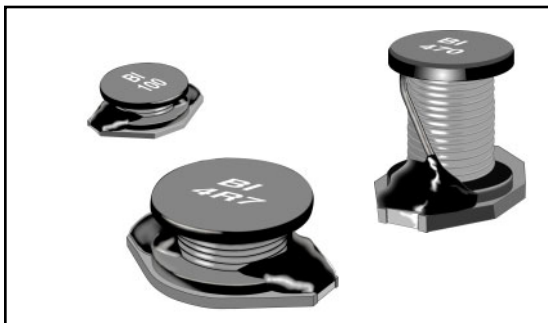
MODEL HM71 SERIES

High Performance

Low Cost

Surface Mount Inductors

NEW PRODUCT



FEATURES AND BENEFITS

- High performance, high current rating
- Wide inductance range, from 1 μ H to 1,000 μ H
- Low profile, small footprint designed for machine placement
- Compatible with vapor phase and infrared reflow soldering

APPLICATIONS

- Notebook computers and PDAs
- DC/DC converters for handheld equipment
- Battery charging circuits
- EMI filters
- Inductor for general purpose

ELECTRICAL / ENVIRONMENTAL

Operating Temperature Range	-40°C to +85°C
Storage Temperature Range	-40°C to +85°C
Insulation System	Class B, 130°C
Temperature Rise at I rms, Typical	40°C

Specifications subject to change without notice.
Last update: 05/06/2003.

SPECIFICATIONS

Part Number	Inductance (1) µH ±20%	DC	I _{SAT} (2) Amps	I _{rms} (3) Amps rms	Competitor Part Number
		Resistance (4) Ω Max.			
HM71-101R0	1.0	0.05	2.90	2.9	DO1608C-102
HM71-101R5	1.5	0.05	2.60	2.8	DO1608C-152
HM71-102R2	2.2	0.07	2.30	2.4	DO1608C-222
HM71-103R3	3.3	0.08	2.0	2.0	DO1608C-232
HM71-104R7	4.7	0.09	1.50	1.5	DO1608C-472
HM71-106R8	6.8	0.13	1.20	1.4	DO1608C-682
HM71-10100	10	0.16	1.10	1.1	DO1608C-103
HM71-10150	15	0.23	0.90	1.2	DO1608C-153
HM71-10220	22	0.37	0.70	0.8	DO1608C-223
HM71-10330	33	0.51	0.58	0.6	DO1608C-333
HM71-10470	47	0.64	0.50	0.5	DO1608C-473
HM71-106R8	68	0.86	0.40	0.4	DO1608C-683
HM71-10101	100	1.27	0.31	0.3	DO1608C-104
HM71-10151	150	2.0	0.27	0.25	DO1608C-154
HM71-10221	220	2.65	0.22	0.2	DO1608C-224
HM71-10331	330	3.80	0.18	0.16	DO1608C-334
HM71-10471	470	5.06	0.16	0.15	DO1608C-474
HM71-10681	680	9.20	0.14	0.12	DO1608C-684
HM71-10102	1000	13.8	0.10	0.07	DO1608C-105
HM71-20100	10	0.11	2.40	2.0	DO3308P-103
HM71-20150	15	0.15	2.0	1.5	DO3308P-153
HM71-20220	22	0.23	1.60	1.3	DO3308P-223
HM71-20330	33	0.30	1.40	1.1	DO3308P-333
HM71-20470	47	0.39	1.0	0.8	DO3308P-473
HM71-20680	68	0.66	0.90	0.7	DO3308P-683
HM71-20101	100	0.84	0.70	0.6	DO3308P-104
HM71-20151	150	1.20	0.60	0.5	DO3308P-154
HM71-20221	220	1.90	0.50	0.4	DO3308P-224
HM71-20331	330	2.70	0.40	0.3	DO3308P-334
HM71-20471	470	4.0	0.30	0.2	DO3308P-474
HM71-20681	680	5.3	0.20	0.1	DO3308P-684
HM71-20102	1000	8.4	0.10	0.05	DO3308P-105
HM71-301R0	1.0	0.009	9.0	6.8	DO3316P-102
HM71-301R5	1.5	0.010	8.0	6.4	DO3316P-152
HM71-302R2	2.2	0.012	7.0	6.1	DO3316P-222
HM71-303R3	3.3	0.015	6.40	5.4	DO3316P-332
HM71-304R7	4.7	0.018	5.40	4.8	DO3316P-472
HM71-306R8	6.8	0.027	4.60	4.4	DO3316P-682
HM71-30100	10	0.038	3.80	3.9	DO3316P-103
HM71-30150	15	0.046	3.0	3.1	DO3316P-153
HM71-30220	22	0.085	2.60	2.7	DO3316P-223

Notes: (1) Inductance measured at 100 kHz, 0.1 Vrms.

(2) I_{SAT} is the saturation current at which inductance rolls off approximately 10%.

(3) I_{rms} is the approximate current at which ΔT = 40°C.

(4) DC resistance measured at 20°C.

SPECIFICATIONS

Part Number	Inductance (1) µH ±20%	DC		I _{SAT} (2) Amps	I _{rms} (3) Amps rms	Competitor Part Number
		Resistance (4) Ω Max.				
HM71-30330	33	0.10		2.0	2.1	D03316P-333
HM71-30470	47	0.14		1.60	1.8	D03316P-473
HM71-30680	68	0.20		1.40	1.5	D03316P-683
HM71-30101	100	0.28		1.20	1.3	D03316P-104
HM71-30151	150	0.40		1.0	1.0	D03316P-154
HM71-30221	220	0.61		0.80	0.8	D03316P-224
HM71-30331	330	1.02		0.60	0.6	D03316P-334
HM71-30471	470	1.27		0.50	0.5	D03316P-474
HM71-30681	680	2.02		0.40	0.4	D03316P-684
HM71-30102	1000	3.0		0.30	0.3	D03316P-105
HM71-40100	10	0.040		8.0	3.5	D03340P-103
HM71-40150	15	0.050		7.0	3.0	D03340P-153
HM71-40220	22	0.066		5.50	2.5	D03340P-223
HM71-40330	33	0.080		4.0	2.0	D03340P-333
HM71-40470	47	0.110		3.80	1.6	D03340P-473
HM71-40680	68	0.170		3.0	1.2	D03340P-683
HM71-40101	100	0.220		2.50	1.2	D03340P-104
HM71-40151	150	0.340		2.0	0.9	D03340P-154
HM71-40221	220	0.440		1.60	0.7	D03340P-224
HM71-40331	330	0.70		1.20	0.6	D03340P-334
HM71-40471	470	0.950		1.0	0.3	D03340P-474
HM71-40681	680	1.20		1.0	0.2	D03340P-684
HM71-40102	1000	2.0		0.80	0.1	D03340P-105
HM71-501R0	1.0	0.009		20.0	8.6	D05022P-102
HM71-502R2	2.2	0.014		16.0	7.1	D05022P-222
HM71-503R3	3.3	0.015		14.0	6.2	D05022P-332
HM71-505R6	5.6	0.020		12.0	5.3	D05022P-562
HM71-50100	10	0.031		10.0	4.3	D05022P-103
HM71-50150	15	0.036		8.0	4.0	D05022P-153
HM71-50220	22	0.047		7.0	3.5	D05022P-223
HM71-50330	33	0.066		5.50	3.0	D05022P-333
HM71-50470	47	0.086		4.50	2.6	D05022P-473
HM71-50680	68	0.130		3.50	2.3	D05022P-683
HM71-50101	100	0.190		3.0	1.8	D05022P-104
HM71-50151	150	0.250		2.60	1.5	D05022P-154
HM71-50221	220	0.380		2.40	1.2	D05022P-224
HM71-50331	330	0.560		1.90	1.0	D05022P-334
HM71-50471	470	0.850		1.40	0.82	D05022P-474
HM71-50681	680	1.10		1.20	0.72	D05022P-684
HM71-50102	1000	1.80		1.0	0.56	D05022P-105

Notes: (1) Inductance measured at 100 kHz, 0.1 Vrms.

(2) I_{SAT} is the saturation current at which inductance rolls off approximately 10%.

(3) I_{rms} is the approximate current at which ΔT = 40°C.

(4) DC resistance measured at 20°C.

OUTLINE DIMENSIONS (Inch/mm)

Figure 1

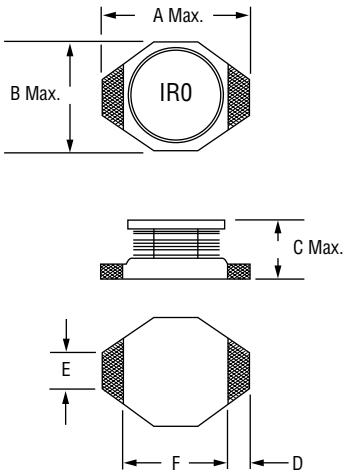
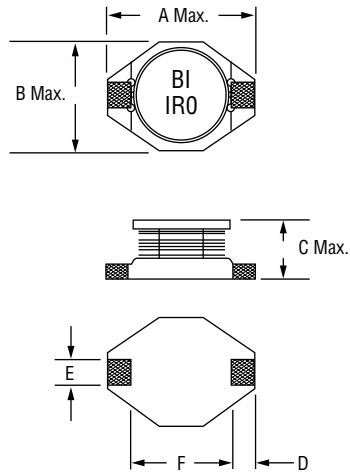
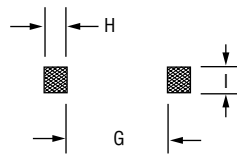
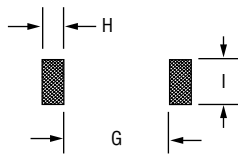


Figure 2



Recommended Solder Pad Layouts



Case Size	Figure	A	B	C	D	E	F	G	H	I
10	1	.260	.175	.115	.040	.050	.170	.160	.055	.140
		6.60	4.45	2.92	1.02	1.27	4.32	4.06	1.40	3.56
20	2	.510	.370	.118	.100	.100	.300	.290	.115	.110
		12.95	9.40	3.00	2.54	2.54	7.62	7.37	2.92	2.79
30	2	.510	.370	.213	.100	.100	.300	.290	.115	.110
		12.95	9.40	5.40	2.54	2.54	7.62	7.37	2.92	2.79
40	2	.510	.370	.450	.100	.100	.300	.290	.115	.110
		12.95	9.40	11.43	2.54	2.54	7.62	7.37	2.92	2.79
50	2	.730	.600	.280	.100	.100	.500	.490	.115	.110
		18.54	15.24	7.11	2.54	2.54	12.70	12.45	2.92	2.79

PACKAGING

Standard: Embossed Tape & Reel
All units oriented with lead #1 to the same side of sprocket hole.

Reel Capacity:	Case Size 10	=	500 Units
	Case Size 20	=	1,000 Units
	Case Size 30	=	550 Units
	Case Size 40	=	250 Units
	Case Size 50	=	250 Units
Diameter:	Case Size 10	=	7" (177.8mm)
	All Other Case Sizes	=	13" (330.2mm)

ORDERING INFORMATION

Model Series ——— **HM71** **30** **4R7**

Case Size: ———

10 = Figure 1
20 = Figure 2
30 = Figure 2
40 = Figure 2
50 = Figure 2

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