MODEL HM75 SERIES

High Current

Surface Mount Inductors

Inductance Range: 0.33 to 100µH
Rated Current: Up to 19 Amps

NEW PRODUCT

FEATURES AND BENEFITS

- High performance, high current rating
- Low profile, small footprint designed for machine placement
- Compatible with vapor phase and infrared reflow soldering
- Self-leaded design, excellent for high current applications

APPLICATIONS

- Note book computers, PDA's
- DC/DC converters for mother board applications
- Battery charging circuits
- EMI filters
- Inductor for general purpose

ELECTRICAL / ENVIRONMENTAL

Operating Temperature Range	-40°C to +125°C
Storage Temperature Range	-40°C to +85°C
Ambient Temperature, Maximum	85°C
Insulation System	Class B, 130°C
Temperature Rise, Maximum	40°C

Specifications subject to change without notice.

SPECIFICATIONS

Part Number	– Rated Inductance – L_{DC} µH Typical	L w/o DC L_O (1) µH ±20%	DC Resistance Max.(4) mΩ	Rated Current I_{RMS} (2) Amps	I_{SAT} (3) Amps
HM75-10R47	0.47	0.57	7.9	6.0	7.7
HM75-101R0	1.0	1.2	12.5	4.4	5.3
HM75-101R5	1.5	1.6	14.5	4.2	4.5
HM75-102R2	2.2	2.6	24.1	3.1	3.5
HM75-103R3	3.3	3.8	31.8	2.9	3.0
HM75-104R7	4.7	5.2	54.7	2.2	2.6
HM75-106R8	6.8	6.9	57.1	1.7	2.2
HM75-10100	10	11	81.3	1.5	1.9
HM75-10150	15	15.3	124	1.2	1.5
HM75-10220	22	23	183	1.0	1.2
HM75-10330	33	36	265	0.82	0.99
HM75-10470	47	48.5	334	0.72	0.87
HM75-20R33	0.33	0.33	2.0	16	20
HM75-20R68	0.68	0.80	3.5	12	13
HM75-201R0	1.0	1.1	4.6	10	11
HM75-201R5	1.5	1.5	6.1	9	9
HM75-202R2	2.2	2.4	7.8	7.4	7.8
HM75-202R7	2.7	2.9	10.0	6.6	7.0
HM75-203R3	3.3	3.3	11.0	5.9	6.4
HM75-204R7	4.7	4.8	15.1	4.8	5.4
HM75-20100	10	10.0	35	3.3	4.3
HM75-20150	15	15.43	45	3.1	3.0
HM75-20220	22	22.5	62	2.8	2.0
HM75-20330	33	33.2	92	2.1	1.7
HM75-20470	47	48.7	139	1.7	1.4
HM75-20680	68	68.2	177	1.5	1.2
HM75-20101	100	103	237	1.2	0.95
HM75-30R47	0.47	0.45	2.1	16	25.1
HM75-301R0	1.0	1.34	3.8	12.5	15.3
HM75-301R5	1.5	1.65	4.9	10	12
HM75-302R2	2.2	3.0	5.1	9.2	10.2
HM75-303R3	3.3	3.44	10	8.0	9.3
HM75-304R7	4.7	5.0	11.4	6.5	7.7
HM75-306R8	6.8	7.73	17.8	5.8	6.2
HM75-30100	10	11	22.8	4.3	5.2
HM75-30150	15	16.4	35.0	3.9	4.3

Notes: (1) Inductance measured at 100kHz, 100 mVrms, OADC.

(2) RMS current is the approximate current at which inductance will decrease by 10%. from its initial value (zero DC) or the DC current at which $\Delta T = 40°C$, whichever is lower.

(3) Saturation current for approximately 30% roll-off.

(4) DC resistance measured at 20°C.

SPECIFICATIONS

Part Number	– Rated Inductance – L_{DC} µH Typical	L w/o DC L_O (1) µH ±20%	DC Resistance Max.(4) mΩ	Rated Current I_{RMS} (2) Amps	I_{SAT} (3) Amps
HM75-30220	22	23.9	49.1	3.1	3.7
HM75-30330	33	33.9	69	2.4	3.0
HM75-30470	47	51	108.2	1.9	2.4
HM75-30680	68	69.5	156	1.6	2.0
HM75-30101	100	101.4	205.5	1.4	1.8
HM75-40R47	0.47	0.47	1.7	19.2	51.7
HM75-401R0	1.0	0.92	2.5	17.3	37.3
HM75-401R3	1.3	1.3	3.5	15	25
HM75-402R2	2.2	2.2	4.7	12	20
HM75-403R3	3.3	3.3	8.4	10	17
HM75-403R9	3.9	3.9	7.5	9	15
HM75-404R7	4.7	5.3	9.5	8.5	15
HM75-406R0	6.0	6.0	13.7	7.5	12
HM75-407R8	7.8	7.8	15.4	7.5	11
HM75-40100	10	10.0	22.0	6.0	10
HM75-40150	15	15.6	29.5	5.5	9.1
HM75-40220	22	22.6	34	4.5	7.6
HM75-40330	33	34.5	52	3.7	6.1
HM75-40470	47	48.0	71	3.1	5.2
HM75-40680	68	69.2	104	2.4	4.3
HM75-40101	100	99.5	156	2.0	3.6
HM75-50R78	0.78	0.78	2.6	15	30
HM75-501R0	1.0	0.92	3.1	17.3	37.3
HM75-501R5	1.5	1.52	4.0	15	28.9
HM75-502R2	2.2	2.27	5.6	12	23.7
HM75-503R3	3.3	3.2	7.0	11	20.0
HM75-503R9	3.9	4.0	10	9	15
HM75-504R7	4.7	4.7	9.5	6.5	10.7
HM75-507R5	7.5	7.5	15	6	9.8
HM75-50100	10	10	40	3.5	8.0
HM75-50150	15	15	50	3.0	7.0
HM75-50220	22	22	66	2.5	5.5
HM75-50330	33	33	80	2.0	4.0
HM75-50470	47	47	110	1.6	3.8
HM75-50680	68	68	170	1.2	3.0
HM75-50101	100	100	220	1.2	2.5

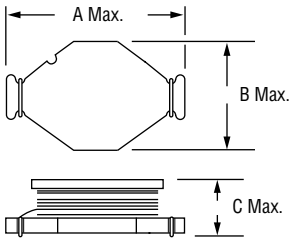
Notes: (1) Inductance measured at 100kHz, 100 mVrms, OADC.

(2) RMS current is the approximate current at which inductance will decrease by 10%. from its initial value (zero DC) or the DC current at which ΔT = 40°C, whichever is lower.

(3) Saturation current for approximately 30% roll-off.

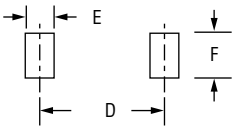
(4) DC resistance measured at 20°C.

OUTLINE DIMENSIONS (Inch/mm)



Case Size	A	B	C	D	E	F
10	.350 8.89	.240 6.09	.217 5.5	.29 7.37	.137 3.48	.225 5.72
20	.530 13.46	.395 10.03	.270 6.90	.410 10.41	.135 3.43	.295 7.49
30	.768 19.5	.52 13.21	.283 7.2	.610 15.5	.135 3.43	.283 7.2
40	.865 21.97	.60 15.24	.315 8.0	.690 17.53	.150 3.81	.370 9.40
50	.530 13.46	.395 10.03	.50 12.7	.410 10.41	.135 3.43	.295 7.49

Recommended Solder Pad Layout



PACKAGING

Standard: Embossed Tape & Reel

Reel:	Diameter		=	13” (330.2mm)
	Capacity:	Case size 10	=	1,000
		Case size 20	=	550
		Case size 30	=	450
		Case size 40	=	275
		Case size 50	=	250

ORDERING INFORMATION

HM75 20 101

Model Series

Case Size

Inductance Code:
1st two digits are significant.
Last digit denotes number of trailing zeros. Values below 10µH "R" denotes decimal point.