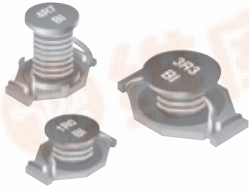


Electrical / Environmental

# HM75

## High Current Surface Mount Inductors



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

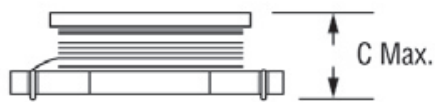
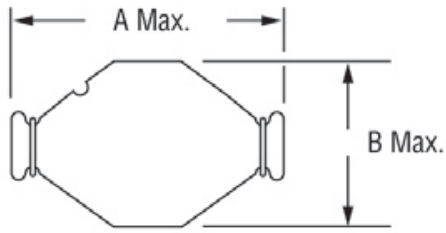
Specifications @ 25 °C

Part Number	— Rated Inductance —			Rated Current I <sub>RMS</sub> (2) Amps	I <sub>SAT</sub> (3) Amps	Part Number	— Rated Inductance —			Rated Current I <sub>RMS</sub> (2) Amps	I <sub>SAT</sub> (3) Amps
	L <sub>DC</sub> µH Typ.	L w/o DC L <sub>0</sub> (1) µH ±20%	DCR Max. mΩ				L <sub>DC</sub> µH Typ.	L w/o DC L <sub>0</sub> (1) µH ±20%	DCR Max. mΩ		
HM75-10R47LF	0.47	0.47	7.9	6.0	7.7	HM75-30220LF	22	23.9	49.1	3.1	3.7
HM75-101R0LF	1.0	1.0	12.5	4.4	5.3	HM75-30330LF	33	33.9	69	2.4	3.0
HM75-101R5LF	1.5	1.6	14.5	4.2	4.5	HM75-30470LF	47	51	108.2	1.9	2.4
HM75-102R2LF	2.2	2.26	24.1	3.1	3.5	HM75-30680LF	68	69.5	156	1.6	2.0
HM75-103R3LF	3.3	3.45	31.8	2.9	3.0	HM75-30101LF	100	101.4	205.5	1.4	1.8
HM75-104R7LF	4.7	4.85	54.7	2.2	2.6	HM75-40R47LF	0.47	0.47	1.7	19.2	51.7
HM75-106R8LF	6.8	6.9	57.1	1.7	2.2	HM75-401R0LF	1.0	0.92	2.5	17.3	37.3
HM75-10100LF	10	10.4	81.3	1.5	1.9	HM75-401R3LF	1.3	1.3	3.5	15	25
HM75-10150LF	15	15.3	124	1.2	1.5	HM75-402R2LF	2.2	2.2	4.7	12	20
HM75-10220LF	22	23	183	1.0	1.2	HM75-403R3LF	3.3	3.3	8.4	10	17
HM75-10330LF	33	33.6	265	0.82	0.99	HM75-403R9LF	3.9	3.9	7.5	9	15
HM75-10470LF	47	48.5	334	0.72	0.87	HM75-404R7LF	4.7	5.3	9.5	8.5	15
HM75-20R33LF	0.33	0.33	2.0	16	20	HM75-406R0LF	6.0	6.0	13.7	7.5	12
HM75-20R68LF	0.68	0.80	3.5	12	13	HM75-407R8LF	7.8	7.8	15.4	7.5	11
HM75-201R0LF	1.0	1.1	4.6	10	11	HM75-40100LF	10	10.0	22.0	6.0	10
HM75-201R5LF	1.5	1.5	6.1	9	9	HM75-40150LF	15	15.6	29.5	5.5	9.1
HM75-202R2LF	2.2	2.3	7.8	7.4	7.8	HM75-40220LF	22	22.6	34	4.5	7.6
HM75-202R7LF	2.7	2.9	10.0	6.6	7.0	HM75-40330LF	33	34.5	52	3.7	6.1
HM75-203R3LF	3.3	3.3	11.0	5.9	6.4	HM75-40470LF	47	48.0	71	3.1	5.2
HM75-204R7LF	4.7	4.8	15.1	4.8	5.4	HM75-40680LF	68	69.2	104	2.4	4.3
HM75-20100LF	10	10.0	35	3.3	4.3	HM75-40101LF	100	103	156	2.0	3.6
HM75-20150LF	15	15.43	45	3.1	3.0	HM75-50R78LF	0.78	0.78	2.6	15	30
HM75-20220LF	22	22.5	62	2.8	2.0	HM75-501R0LF	1.0	0.92	3.1	17.3	37.3
HM75-20330LF	33	33.2	92	2.1	1.7	HM75-501R5LF	1.5	1.52	4.0	15	28.9
HM75-20470LF	47	48.7	139	1.7	1.4	HM75-502R2LF	2.2	2.27	5.6	12	23.7
HM75-20680LF	68	68.2	177	1.5	1.2	HM75-503R3LF	3.3	3.2	7.0	11	20.0
HM75-20101LF	100	103	237	1.2	0.95	HM75-503R9LF	3.9	4.0	10	9	15
HM75-30R47LF	0.47	0.45	2.1	16	25.1	HM75-504R7LF	4.7	4.7	9.5	6.5	10.7
HM75-301R0LF	1.0	1.34	3.8	12.5	15.3	HM75-507R5LF	7.5	7.5	15	6	9.8
HM75-301R5LF	1.5	1.65	4.9	10	12	HM75-50100LF	10	10	40	3.5	8.0
HM75-302R2LF	2.2	2.3	5.1	9.2	10.2	HM75-50150LF	15	15	50	3.0	7.0
HM75-303R3LF	3.3	3.44	10	8.0	9.3	HM75-50220LF	22	22	66	2.5	5.5
HM75-304R7LF	4.7	5.0	11.4	6.5	7.7	HM75-50330LF	33	33	80	2.0	4.0
HM75-306R8LF	6.8	6.9	17.8	5.8	6.2	HM75-50470LF	47	47	110	1.6	3.8
HM75-30100LF	10	11	22.8	4.3	5.2	HM75-50680LF	68	68	170	1.2	3.0
HM75-30150LF	15	16.4	35.0	3.9	4.3	HM75-50101LF	100	100	220	1.2	2.5

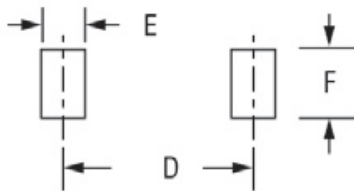
- Notes: (1) Inductance is measured at 100kHz, 100 mVrms, OADC.  
 (2) RMS current is the approximate current at which inductance will decrease by 10% from its initial value (zero DC) or the DC current at which ΔT = 40°C, whichever is lower.  
 (3) Saturation current for approximately 30% roll-off.



### Outline Dimensions (Inch/mm)



#### Recommended Solder Pad Layout



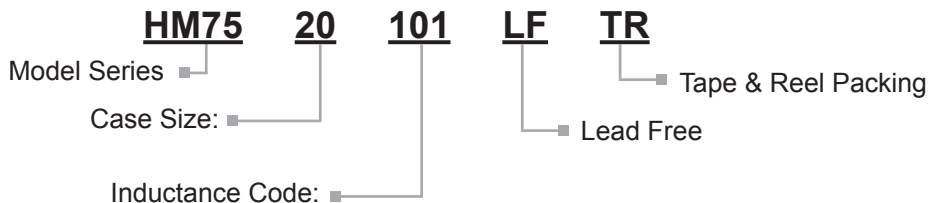
Case Size	A	B	C	D	E	F
10	.350	.240	.217	.249	.137	.225
	8.89	6.09	5.5	6.33	3.48	5.72
20	.530	.395	.272	.410	.135	.295
	13.46	10.03	6.90	10.41	3.43	7.49
30	.768	.52	.283	.610	.135	.283
	19.5	13.21	7.2	15.5	3.43	7.2
40	.865	.60	.315	.690	.150	.370
	21.97	15.24	8.0	17.53	3.81	9.40
50	.530	.395	.50	.410	.135	.295
	13.46	10.03	12.7	10.41	3.43	7.49

### Packaging

**Standard:** Embossed Tape and Reel

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

### Ordering Information



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