Magnetics

TT Electronics
Make Possible

Miniature Low Profile, Shielded Surface Mount Inductors

Model HM66 Series



Features

- Operating Temperature Range -40°C to +125°C
- Ambient Temperature, Maximum 80°C
- Temperature Rise, Maximum 40°C
- Operating Frequency Up to 3MHz
- RoHS Compliant

Specifications @ 25°C

Part Number	Inductance[1] Nominal µH ± 20%	DC Resistance Ω Max.	Rated [2] Current Amps	Figure	Part Number	Inductance[1] Nominal µH ± 20%	DC Resistance Ω Max.	Rated [2] Current Amps	Figure
HM66-101R5LF	1.5	0.055	1.55	1	HM66-30150LF	15	0.1490	0.76	2
HM66-102R2LF	2.2	0.072	1.20	1	HM66-30180LF	18	0.1660	0.72	2
HM66-103R3LF	3.3	0.085	1.10	1	HM66-30220LF	22	0.2350	0.70	2
HM66-104R7LF	4.7	0.105	0.90	1	HM66-30270LF	27	0.2610	0.58	2
HM66-105R6LF	5.6	0.140	0.80	1	HM66-30330LF	33	0.3780	0.56	2
HM66-106R8LF	6.8	0.170	0.73	1	HM66-30390LF	39	0.3837	0.50	2
HM66-10100LF	10	0.210	0.55	1	HM66-30470LF	47	0.5870	0.48	2
HM66-10150LF	15	0.295	0.45	1	HM66-30560LF	56	0.6245	0.41	2
HM66-10220LF	22	0.430	0.40	1	HM66-30680LF	68	0.6990	0.35	2
HM66-10330LF	33	0.675	0.32	1	HM66-30820LF	82	0.9148	0.32	2
HM66-151R5LF	1.5	0.055	1.55	2	HM66-30101LF	100	1.020	0.29	2
HM66-152R2LF	2.2	0.072	1.20	2	HM66-30121LF	120	1.270	0.27	2
HM66-153R3LF	3.3	0.085	1.10	2	HM66-30151LF	150	1.350	0.24	2
HM66-154R7LF	4.7	0.105	0.90	2	HM66-30181LF	180	1.540	0.22	2
HM66-156R8LF	6.8	0.170	0.73	2	HM66-404R1LF	4.1	0.057	1.95	2
HM66-15100LF	10	0.210	0.55	2	HM66-405R4LF	5.4	0.076	1.60	2
HM66-15150LF	15	0.295	0.45	2	HM66-406R2LF	6.2	0.096	1.40	2
HM66-15220LF	22	0.430	0.40	2	HM66-408R9LF	8.9	0.116	1.25	2
HM66-15330LF	33	0.675	0.32	2	HM66-40100LF	10	0.124	1.20	2
HM66-201R0LF	1.0	0.045	1.72	2	HM66-40120LF	12	0.153	1.10	2
HM66-202R2LF	2.2	0.075	1.32	2	HM66-40150LF	15	0.196	0.97	2
HM66-202R7LF	2.7	0.105	1.28	2	HM66-40180LF	18	0.210	0.85	2
HM66-203R3LF	3.3	0.110	1.04	2	HM66-40220LF	22	0.290	0.80	2
HM66-203R9LF	3.9	0.155	0.88	2	HM66-40270LF	27	0.330	0.75	2
HM66-204R7LF	4.7	0.162	0.84	2	HM66-40330LF	33	0.386	0.65	2
HM66-205R6LF	5.6	0.170	0.80	2	HM66-40390LF	39	0.520	0.57	2
HM66-206R8LF	6.8	0.200	0.76	2	HM66-40470LF	47	0.595	0.54	2
HM66-208R2LF	8.2	0.245	0.68	2	HM66-40560LF	56	0.665	0.50	2
HM66-20100LF	10	0.200	0.61	2	HM66-40680LF	68	0.840	0.43	2
HM66-20120LF	12	0.210	0.56	2	HM66-40820LF	82	0.978	0.41	2
HM66-20150LF	15	0.240	0.50	2	HM66-40101LF	100	1.200	0.36	2
HM66-20180LF	18	0.338	0.48	2	HM66-502R5LF	2.5	0.018	2.60	2
HM66-20220LF	22	0.397	0.41	2	HM66-503R0LF	3.0	0.024	2.40	2
HM66-20270LF	27	0.441	0.35	2	HM66-504R2LF	4.2	0.031	2.20	2
HM66-20330LF	33	0.694	0.32	2	HM66-505R3LF	5.3	0.038	1.90	2
HM66-20390LF	39	0.709	0.30	2	HM66-506R2LF	6.2	0.045	1.80	2
HM66-301R2LF	1.2	0.0236	2.56	2	HM66-508R2LF	8.2	0.053	1.60	2
HM66-301R8LF	1.8	0.0275	2.20	2	HM66-50100LF	10	0.065	1.30	2
HM66-302R2LF	2.2	0.0313	2.04	2	HM66-50120LF	12	0.076	1.20	2
HM66-302R7LF	2.7	0.0433	1.60	2	HM66-50150LF	15	0.103	1.10	2
HM66-303R3LF	3.3	0.0492	1.57	2	HM66-50180LF	18	0.110	1.00	2
HM66-303R9LF	3.9	0.0648	1.44	2	HM66-50220LF	22	0.122	0.90	2
HM66-304R7LF	4.7	0.0720	1.32	2	HM66-50270LF	27	0.175	0.85	2
HM66-305R6LF	5.6	0.1009	1.17	2	HM66-50330LF	33	0.189	0.75	2
HM66-306R8LF	6.8	0.1089	1.12	2	HM66-50390LF	39	0.212	0.70	2
HM66-308R2LF	8.2	0.1175	1.04	2	HM66-50470LF	47	0.260	0.62	2
HM66-30100LF	10	0.1283	1.00	2	HM66-50560LF	56	0.305	0.58	2
HM66-30120LF	12	0.1316	0.84	2	HM66-50680LF	68	0.355	0.52	2

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.

All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Bi technologies

www.ttelectronicsmagnetics.com

© TT Electronics plc

Specifications @ 25°C (Continued)

Part Number	Inductance(1) Nominal µH ± 20%	DC Resistance Ω Max.	Rated (2) Current Amps	Figure	Part Number	Inductance(1) Nominal µH ± 20%	DC Resistance Ω Max.	Rated (2) Current Amps	Figure
HM66-50820LF	82	0.463	0.46	2	HM66-70120LF	12	0.053	1.70	2
HM66-50101LF	100	0.520	0.42	2	HM66-70150LF	15	0.057	1.60	2
HM66-603R0LF	3.0	0.024	3.00	2	HM66-70180LF	18	0.092	1.50	2
HM66-603R9LF	3.9	0.027	2.60	2	HM66-70220LF	22	0.096	1.30	2
HM66-605R0LF	5.0	0.031	2.40	2	HM66-70270LF	27	0.109	1.20	2
HM66-606R0LF	6.0	0.035	2.25	2	HM66-70330LF	33	0.124	1.10	2
HM66-607R3LF	7.3	0.054	2.10	2	HM66-70390LF	39	0.138	1.00	2
HM66-608R6LF	8.6	0.058	1.85	2	HM66-70470LF	47	0.155	0.95	2
HM66-60100LF	10	0.065	1.70	2	HM66-70560LF	56	0.202	0.85	2
HM66-60120LF	12	0.070	1.55	2	HM66-70680LF	68	0.234	0.75	2
HM66-60150LF	15	0.084	1.40	2	HM66-70820LF	82	0.324	0.70	2
HM66-60180LF	18	0.095	1.32	2	HM66-70101LF	100	0.358	0.65	2
HM66-60220LF	22	0.128	1.20	2	HM66-70221LF	220	0.820	0.45	2
HM66-60270LF	27	0.142	1.05	2	HM66-801R5LF	1.5	0.0081	10.0	3
HM66-60330LF	33	0.165	0.97	2	HM66-802R5LF	2.5 ± 30%	0.0105	7.50	3
HM66-60390LF	39	0.210	0.86	2	HM66-803R8LF	3.8	0.013	6.00	3
HM66-60470LF	47	0.238	0.80	2	HM66-805R2LF	5.2	0.022	5.50	3
HM66-60560LF	56	0.277	0.73	2	HM66-807R0LF	7	0.027	4.80	3
HM66-60680LF	68	0.304	0.65	2	HM66-80100LF	10	0.035	4.40	3
HM66-60820LF	82	0.390	0.60	2	HM66-80150LF	15	0.050	3.60	3
HM66-60101LF	100	0.535	0.54	2	HM66-80220LF	22	0.073	2.90	3
HM66-621R0LF	1.0	0.023	3.50	4	HM66-80330LF	33	0.093	2.30	3
HM66-621R5LF	1.5	0.036	2.47	4	HM66-80470LF	47	0.128	2.10	3
HM66-621R8LF	1.8	0.036	2.47	4	HM66-80680LF	68	0.213	1.50	3
HM66-703R3LF	3.3	0.020	3.50	2	HM66-80101LF	100	0.304	1.35	3
HM66-705R0LF	5.0	0.024	2.90	2	HM66-80151LF	150	0.506	1.15	3
HM66-706R2LF	6.2	0.027	2.50	2	HM66-80221LF	220	0.756	0.92	3
HM66-707R4LF	7.4	0.031	2.30	2	HM66-80331LF	330	1.090	0.70	3
HM66-708R7LF	8.7	0.034	2.20	2	HM66-80561LF	560	1.696	0.43	3
HM66-70100LF	10	0.038	2.00	2	HM66-80102LF	1000	2.853	0.33	3

Notes: (1) Test conditions for case sizes 10, 15, 20, 30 , 80 = 100 kHz, 0.1 V without DC current. Test conditions for case sizes 40, 50, 60, 70 = 10 kHz, 0.1 V without DC current. Inductance for case size 62 is measured at 100kHz, 1V without DC current3.
(2) Rated DC current is the approximate current at which inductance will be decreased by 35% from its initial (zero DC) value or the DC current at which ΔT = 40°C, whichever is lower.

Packaging

Standard:	Embossed Tape and Reel			
	Reel:	Diameter:	Case size 10, 15	= 7" (177.8mm)
			All other case sizes	= 13" (330.2mm)
		Capacity:	Case size 20, 62	= 3,000 Units
			Case size 30, 40, 50	= 2,000 Units
			Case size 60	= 1,500 Units
			Case size 10, 15, 70	= 1,000 Units
			Case size 80	= 800 Units

Ordering Information

HM66 - 80 100 LF TR13

Model Series

Case Size:
10 (Figure 1) 50 (Figure 2)
15 (Figure 2) 60 (Figure 2)
20 (Figure 2) 62 (Figure 4)
30 (Figure 2) 70 (Figure 2)
40 (Figure 2) 80 (Figure 3)

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

Lead-Free

Tape & Reel Packing
7 - 7" reel
13 - 13" reel

General Note
TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

© TT Electronics plc

Outline Dimensions (mm)

Figure 1

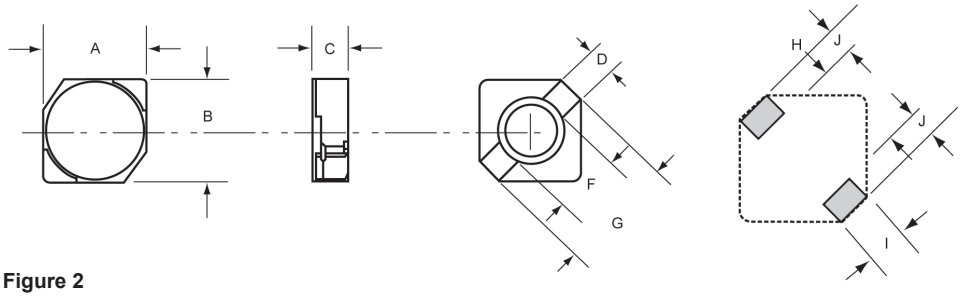


Figure 2

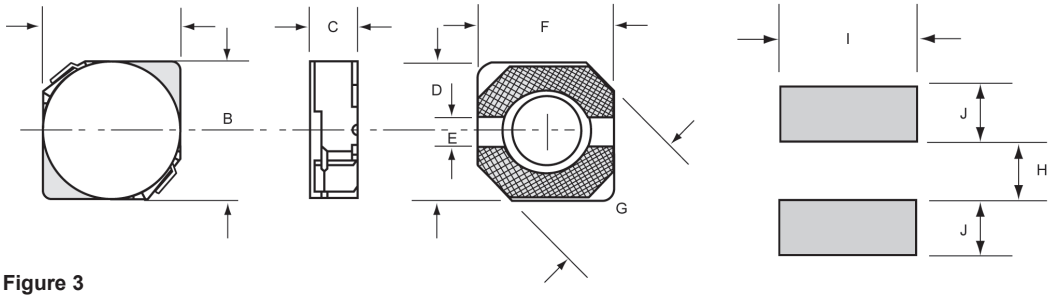


Figure 3

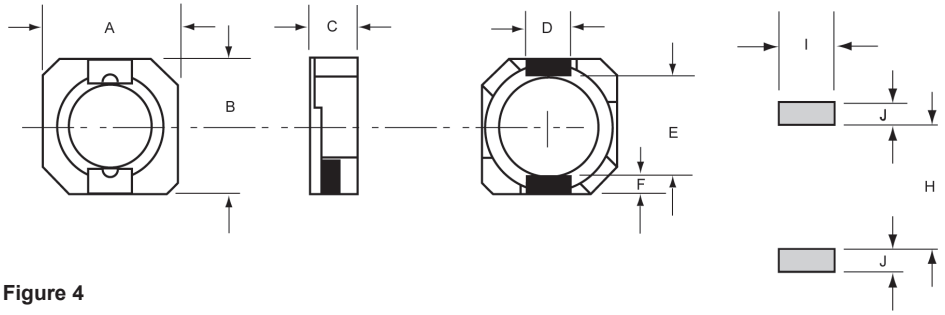
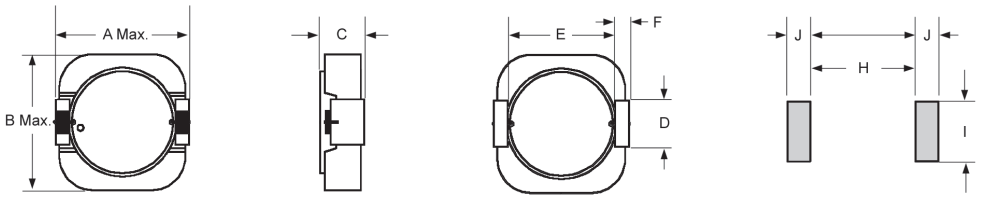


Figure 4



Case Size	Figure	A	B	C Max.	D	E	F	G Max.	H	I	J
10	1	3.8 ± 0.5	3.8 ± 0.5	1.8	1.15 ± 0.25	-	2.8 ± 0.1	5.2	2.4	1.55	1.4
15	2	3.8 ± 0.5	3.8 ± 0.5	1.85	3.8 ± 0.3	1.1 ± 0.15	3.8 ± 0.3	5.5	1.1	4.5	1.7
20	2	4.7 ± 0.5	4.7 ± 0.5	2.1	4.5 ± 0.3	1.5 ± 0.15	4.5 ± 0.3	6.9	1.5	5.3	1.9
30	2	4.7 ± 0.5	4.7 ± 0.5	3.0	4.5 ± 0.3	1.5 ± 0.15	4.5 ± 0.3	6.9	1.5	5.3	1.9
40	2	5.7 ± 0.5	5.7 ± 0.5	2.0	5.5 ± 0.3	2.0 ± 0.15	5.5 ± 0.3	8.2	2.0	6.3	2.15
50	2	5.7 ± 0.5	5.7 ± 0.5	3.0	5.5 ± 0.3	2.0 ± 0.15	5.5 ± 0.3	8.2	2.0	6.3	2.15
60	2	6.7 ± 0.5	6.7 ± 0.5	3.0	6.5 ± 0.3	2.0 ± 0.15	6.5 ± 0.3	9.5	2.0	7.3	2.65
62	4	6.7	6.2	2.0	2.0 ± 0.15	5.0 ± 0.3	0.6 ± 0.15	-	4.6	2.6	1.0
70	2	6.7 ± 0.5	6.7 ± 0.5	4.0	6.5 ± 0.3	2.0 ± 0.15	6.5 ± 0.3	9.5	2.0	7.3	2.65
80	3	10.0 ± 0.5	10.2 ± 0.5	4.0	3.0 ± 0.1	7.7 ± 0.3	1.2 ± 0.15	-	7.3	3.2	1.7

General Note
TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

© TT Electronics plc