Electrical / Environmental

HM79

Low Cost Medium Power Surface Mount Inductors

- Operating Temperature Range -40°C to +125°C
- Ambient Temperature, Maximum 70°C
- Insulation System Class F, 155°C
- Temperature Rise, Maximum 40°C
- Operating Frequency Up to 3MHz

RoHS Compliant

Specifications @ 25°C

Part Number	Inductance µH ± 20% (1)	DC Resistance Ω Max.	Rated Current (2) Amps	Part Number	Inductance µH ± 20% (1)	DC Resistance Ω Max.	Rated Current (2) Amps
HM79-101R0LF	1.0	0.048	2.56	HM79-30330LF	33	0.170	0.85
HM79-101R4LF	1.4	0.056	2.52	HM79-30390LF	39	0.217	0.74
HM79-101R8LF	1.8	0.063	1.95	HM79-30470LF	47	0.252	0.68
HM79-102R2LF	2.2	0.071	1.75	HM79-30560LF	56	0.282	0.64
HM79-102R7LF	2.7	0.078	1.58	HM79-30680LF	68	0.332	0.59
HM79-103R3LF	3.3	0.086	1.44	HM79-30820LF	82	0.406	0.54
HM79-103R9LF	3.9	0.093	1.33	HM79-30101LF	100	0.481	0.51
HM79-104R7LF	4.7	0.108	1.15	HM79-30121LF	120	0.536	0.49
HM79-105R6LF	5.6	0.125	0.99	HM79-30151LF	150	0.755	0.40
HM79-106R8LF	6.8	0.131	0.95	HM79-30181LF	180	1.022	0.36
HM79-108R2LF	8.2	0.146	0.84	HM79-30221LF	220	1.200	0.31
HM79-10100LF	10	0.182	1.04	HM79-30271LF	270	1.306	0.29
HM79-10120LF	12	0.210	0.97	HM79-30331LF	330	1.495	0.28
HM79-10150LF	15	0.235	0.85	HM79-40100LF	10	0.07	2.30
HM79-10180LF	18	0.338	0.74	HM79-40120LF	12	0.08	2.00
HM79-10220LF	22	0.378	1.00	HM79-40150LF	15	0.09	1.80
HM79-10270LF	27	0.522	0.62	HM79-40180LF	18	0.10	1.60
HM79-10330LF	33	0.540	0.56	HM79-40220LF	22	0.11	1.50
HM79-201R0LF	1.0	0.015	8.00	HM79-40270LF	27	0.12	1.30
HM79-204R7LF	4.7	0.057	5.50	HM79-40330LF	33	0.13	1.20
HM79-206R8LF	6.8	0.060	2.00	HM79-40390LF	39	0.16	1.10
HM79-20100LF	10	0.10	1.44	HM79-40470LF	47	0.18	1.00
HM79-20120LF	12	0.12	1.40	HM79-40560LF	56	0.24	0.94
HM79-20150LF	15	0.14	1.30	HM79-40680LF	68	0.28	0.85
HM79-20180LF	18	0.15	1.23	HM79-40820LF	82	0.37	0.78
HM79-20220LF	22	0.18	1.11	HM79-40101LF	100	0.43	0.72
HM79-20270LF	27	0.20	0.97	HM79-40121LF	120	0.47	0.66
HM79-20330LF	33	0.23	0.88	HM79-40151LF	150	0.64	0.58
HM79-20390LF	39	0.32	0.80	HM79-40181LF	180	0.71	0.51
HM79-20470LF	47	0.37	0.72	HM79-40221LF	220	0.96	0.49
HM79-20560LF	56	0.42	0.68	HM79-40271LF	270	1.11	0.42
HM79-20680LF	68	0.46	0.61	HM79-40331LF	330	1.26	0.40
HM79-20820LF	82	0.60	0.58	HM79-40391LF	390	1.77	0.36
HM79-20101LF	100	0.70	0.52	HM79-40471LF	470	1.96	0.34
HM79-20121LF	120	0.93	0.48	HM79-452R3LF	2.3	0.008	9.00
HM79-20151LF	150	1.10	0.40	HM79-461R5LF	1.5	0.005	14.00
HM79-20181LF	180	1.38	0.38	HM79-50100LF	10	0.053	2.38
HM79-20221LF	220	1.57	0.35	HM79-50120LF	12	0.061	2.13
HM79-30100LF	10	0.080	1.44	HM79-50150LF	15	0.070	1.87
HM79-30120LF	12	0.089	1.39	HM79-50180LF	18	0.081	1.73
HM79-30150LF	15	0.104	1.24	HM79-50220LF	22	0.088	1.60
HM79-30180LF	18	0.111	1.12	HM79-50270LF	27	0.100	1.44
HM79-30220LF	22	0.129	1.07	HM79-50330LF	33	0.120	1.26
HM79-30270LF	27	0.153	0.94	HM79-50390LF	39	0.151	1.20

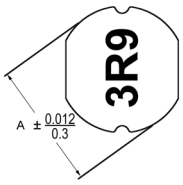
Specifications @ 25°C (Cont'd)

Part Number	Inductance µH ± 20% (1)	DC Resistance Ω Max	Rated Current (2) Amps	Part Number	Inductance µH ± 20% (1)	DC Resistance Ω Max	Rated Current (2) Amps
HM79-50470LF	47	0.170	1.10	HM79-60270LF	27	0.11	1.76
HM79-50560LF	56	0.199	1.01	HM79-60330LF	33	0.12	1.50
HM79-50680LF	68	0.223	0.91	HM79-60390LF	39	0.14	1.37
HM79-50820LF	82	0.252	0.85	HM79-60470LF	47	0.17	1.28
HM79-50101LF	100	0.344	0.74	HM79-60560LF	56	0.19	1.17
HM79-50121LF	120	0.396	0.69	HM79-60680LF	68	0.22	1.11
HM79-50151LF	150	0.544	0.61	HM79-60820LF	82	0.25	1.00
HM79-50181LF	180	0.621	0.56	HM79-60101LF	100	0.35	0.97
HM79-50221LF	220	0.721	0.53	HM79-60121LF	120	0.40	0.89
HM79-50271LF	270	0.949	0.45	HM79-60151LF	150	0.47	0.78
HM79-50331LF	330	1.100	0.42	HM79-60181LF	180	0.63	0.72
HM79-50391LF	390	1.245	0.38	HM79-60221LF	220	0.73	0.66
HM79-50471LF	470	1.526	0.35	HM79-60271LF	270	0.97	0.57
HM79-50561LF	560	1.904	0.32	HM79-60331LF	330	1.15	0.52
HM79-60100LF	10	0.06	2.60	HM79-60391LF	390	1.30	0.48
HM79-60120LF	12	0.07	2.45	HM79-60471LF	470	1.48	0.42
HM79-60150LF	15	0.08	2.27	HM79-60561LF	560	1.90	0.33
HM79-60180LF	18	0.09	2.15	HM79-60681LF	680	2.25	0.28
HM79-60220LF	22	0.10	1.95	HM79-60821LF	820	2.55	0.24

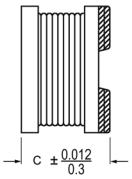
Notes: (1) Test conditions for case sizes 10, 20, 45 & 46 = 100kHz, 0.1 Vrms without DC current. Inductance for case sizes 30, 40, 50 & 60 is measured at 1kHz without DC current.
(2) Rated DC current is the approximate current at which inductance will be decreased by 10% from its initial (zero DC) value or the DC current at which ΔT = 40°C, whichever is lower.

Outline Dimensions (Inch/mm) / Packaging

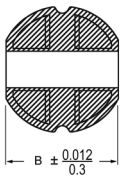
Top View



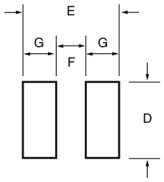
Side View



Bottom View



Recommended Solder Pad Layout



Case size	A	B	C	D	E	F	G	Reel Capacity
10	.177 4.5	.158 4.0	.126 3.2	.177 4.5	.205 5.2	.059 1.5	.069 1.75	1500
20	.228 5.8	.205 5.2	.177 4.5	.228 5.8	.240 6.1	.067 1.7	.085 2.15	1500
30	.307 7.8	.276 7.0	.140 3.5	.315 8.0	.315 8.0	.079 2.0	.118 3.0	1000
40	.307 7.8	.276 7.0	.199 5.0	.315 8.0	.315 8.0	.079 2.0	.118 3.0	1000
45	.307 7.8	.276 7.0	.228 5.8	.315 8.0	.315 8.0	.079 2.0	.118 3.0	800
46	.307 7.8	.276 7.0	.307 7.8	.315 8.0	.315 8.0	.079 2.0	.118 3.0	500
50	.394 10.0	.354 9.0	.158 4.0	.394 10.0	.394 10.0	.098 2.5	.148 3.75	1000
60	.394 10.0	.354 9.0	.213 5.4	.394 10.0	.394 10.0	.098 2.5	.148 3.75	500

Ordering Information

HM79 - 30 101 LF TR13

- HM79 - Model Series
- 30 - Case Size: 10, 20, 30, 40, 45, 46, 50, 60
- 101 - Inductance Code: First 2 digits are significant. Last digit denotes the number of trailing zeros. For values below 10µH, 'R' denotes the decimal point.
- LF - Lead-Free
- TR13 - TR - Tape & Reel Packing, 13 - 13" reel