

Power Inductors

HA79M Series



Features:

- Operating temperature range -55°C to +155°C
- Ambient temperature, max +115°C
- Temperature rise, 40°C
- Operating frequency up to 3MHz
- AEC-Q200 certified



Description:

The HA79M is a miniature, low-cost, surface mount power inductor targeted for high-reliability automotive applications. Due to its low core loss ferrite material, it is an excellent component for high frequency DC-DC converters applications with a switching frequency up to 3 MHz. It has wide range of inductances and package sizes.

Applications:

- Filtering of supply voltages
- Coupling, decoupling
- DC/DC converter
- Automotive electronics

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.

Electrical Specifications

Part Number	Inductance ($\mu\text{H} \pm 20\%$ @0A)	DCR (Ω) Max	Isat (A) - max	Irms (A)- max
HA79M-101R0LFTR	1.0	0.013	4.50	3.80
HA79M-101R5LFTR	1.5	0.022	4.50	3.50
HA79M-101R8LFTR	1.8	0.042	3.38	3.00
HA79M-102R2LFTR	2.2	0.042	3.38	2.50
HA79M-102R7LFTR	2.7	0.050	2.50	2.50
HA79M-103R3LFTR	3.3	0.050	2.50	2.20
HA79M-103R9LFTR	3.9	0.070	2.50	2.00
HA79M-104R7LFTR	4.7	0.094	2.46	1.82
HA79M-105R6LFTR	5.6	0.110	2.40	1.80
HA79M-106R8LFTR	6.8	0.132	2.20	1.80
HA79M-108R2LFTR	8.2	0.140	2.00	1.60
HA79M-10100LFTR	10.0	0.150	1.74	1.45
HA79M-10120LFTR	12.0	0.180	1.40	1.30
HA79M-10150LFTR	15.0	0.240	1.20	0.85
HA79M-10220LFTR	22.0	0.350	1.10	0.80
HA79M-10270LFTR	27.0	0.500	0.71	0.75
HA79M-10330LFTR	33.0	0.500	0.64	0.56
HA79M-10470LFTR	47.0	0.700	0.64	0.56
HA79M-10560LFTR	56.0	0.850	0.50	0.56
HA79M-10680LFTR	68.0	1.117	0.46	0.56
HA79M-10101LFTR	100.0	1.300	0.45	0.50
HA79M-10151LFTR	150.0	3.400	0.44	0.28
HA79M-10221LFTR	220.0	4.000	0.25	0.18
HA79M-10331LFTR	330.0	5.000	0.15	0.18
HA79M-10471LFTR	470.0	5.000	0.20	0.20
HA79M-10681LFTR	680.0	14.000	0.16	0.11
HA79M-10102LFTR	1000.0	12.000	0.12	0.10

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 | BI Technologies

A-1445, Jalan Tanjung Api, 25050 Kuantan, Pahang Darul Makmur, Malaysia

Ph: +60 9 565 8888

<https://www.ttelectronics.com/products/brands/bi-technologies/>

Electrical Specifications

Part Number	Inductance ($\mu\text{H} \pm 20\% @ 0\text{A}$)	DCR (Ω) Max	Isat (A) - max	Irms (A)- max
HA79M-20R47LFTR	0.47	0.0071	9.50	7.00
HA79M-201R0LFTR	1.00	0.0100	7.50	6.00
HA79M-202R2LFTR	2.2	0.0220	7.10	5.70
HA79M-203R3LFTR	3.3	0.0238	4.00	4.00
HA79M-204R7LFTR	4.7	0.0353	3.00	3.00
HA79M-20100LFTR	10.0	0.0650	1.44	1.80
HA79M-20150LFTR	15.0	0.0980	1.30	1.50
HA79M-20180LFTR	18.0	0.1600	1.23	1.14
HA79M-20220LFTR	22.0	0.1700	1.24	1.14
HA79M-20330LFTR	33.0	0.2100	1.17	1.09
HA79M-20470LFTR	47.0	0.3200	1.00	0.90
HA79M-20560LFTR	56.0	0.3500	1.00	0.80
HA79M-20680LFTR	68.0	0.5000	0.80	0.80
HA79M-20820LFTR	82.0	0.5000	0.80	0.80
HA79M-20101LFTR	100.0	0.6000	0.65	0.65
HA79M-20151LFTR	150.0	1.1000	0.40	0.50
HA79M-20181LFTR	180.0	1.1000	0.38	0.45
HA79M-20221LFTR	220.0	1.3000	0.35	0.37
HA79M-20102LFTR	1000.0	5.6000	0.26	0.20
HA79M-601R5LFTR	1.5	0.007	12.00	12.50
HA79M-602R2LFTR	2.2	0.010	8.50	8.50
HA79M-603R3LFTR	3.3	0.016	8.00	7.00
HA79M-604R7LFTR	4.7	0.016	6.50	6.50
HA79M-605R6LFTR	5.6	0.019	5.00	5.40
HA79M-606R8LFTR	6.8	0.023	5.00	5.40
HA79M-608R2LFTR	8.2	0.025	4.50	3.80

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 | BI Technologies
A-1445, Jalan Tanjung Api, 25050 Kuantan, Pahang Darul Makmur, Malaysia

Ph: +60 9 565 8888

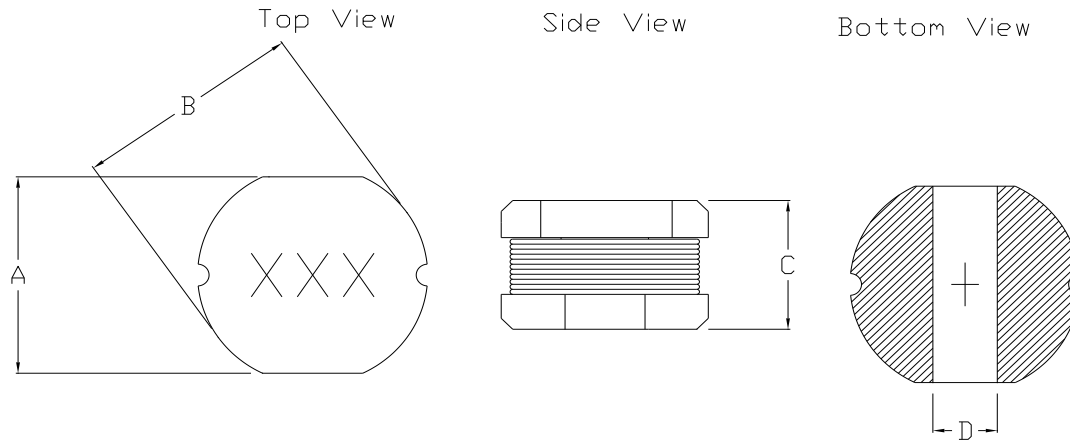
<https://www.ttelectronics.com/products/brands/bi-technologies/>

Electrical Specifications

Part Number	Inductance ($\mu\text{H} \pm 20\%$ @0A)	DCR (Ω) Max	Isat (A) - max	Irms (A)- max
HA79M-60100LFTR	10.0	0.060	4.00	3.80
HA79M-60150LFTR	15.0	0.080	3.00	2.80
HA79M-60220LFTR	22.0	0.100	2.80	2.60
HA79M-60270LFTR	27.0	0.110	2.40	2.20
HA79M-60330LFTR	33.0	0.120	2.40	2.20
HA79M-60470LFTR	47.0	0.120	2.30	2.20
HA79M-60560LFTR	56.0	0.190	2.20	2.00
HA79M-60680LFTR	68.0	0.230	2.00	1.80
HA79M-60820LFTR	82.0	0.240	1.80	1.60
HA79M-60101LFTR	100.0	0.280	1.60	1.40
HA79M-60121LFTR	120.0	0.340	1.40	1.30
HA79M-60151LFTR	150.0	0.430	1.20	1.30
HA79M-60221LFTR	220.0	0.570	0.80	0.80
HA79M-60331LFTR	330.0	1.150	0.59	0.52
HA79M-60471LFTR	470.0	1.480	0.50	0.42
HA79M-60561LFTR	560.0	1.540	0.45	0.41
HA79M-60681LFTR	680.0	1.780	0.43	0.40
HA79M-60821LFTR	820.0	2.160	0.41	0.40
HA79M-60102LFTR	1000.0	3.000	0.40	0.40

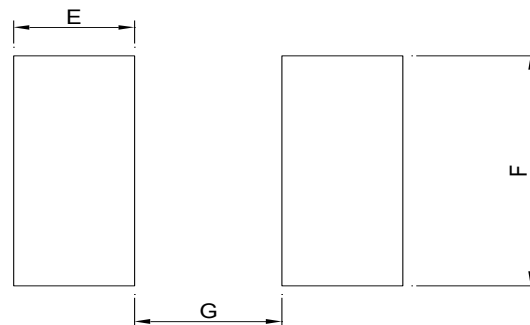
- Notes: (1) Isat is the saturation current at which inductance rolls off at 20% approximately from its initial (zero DC)
 (2) Irms is the approximate current at which $\Delta T = 40^\circ\text{C}$ max
 (3) Test condition 100kHz @ 1V
 (4) Tested at 25°C

Outline Dimensions (mm)



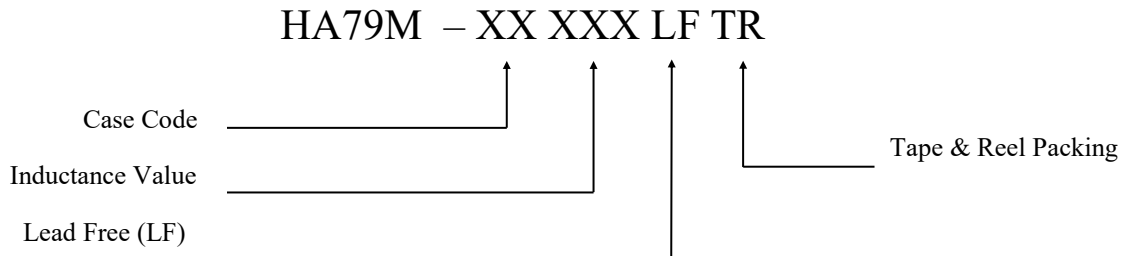
CASE SIZE	A (mm) ± 0.30	B (mm) ± 0.30	C (mm) - Max	D (mm) - Typ
HA79M-10 series	4.00	4.50	3.50	1.80
HA79M-20 series	5.20	5.80	4.80	2.00
HA79M-60 series	9.00	10.00	6.00	3.20

PCB layout (mm)



CASE SIZE	E (mm) - Typ	F (mm) - Typ	G (mm) - Typ
HA79M-10 series	2.00	4.50	1.00
HA79M-20 series	2.00	5.50	1.50
HA79M-60 series	4.40	10.00	2.80

Packaging



Standard:	Embossed Tape and Reel			
	Reel:	Diameter:	All case size	= 13" (330mm)
		Capacity:	Case size 10 series	= 2,000 units
			Case size 20 series	= 1,500 units
			Case size 60 series	= 1,000 units