

MC Series

Piconics MC series is a microminiature broadband air core choke with high self-resonant frequency, suitable for microwave applications. The coil is ceramic substrate mounted for ease of application and utilizes gold plated terminations so that soldering simultaneously anchors the ceramic chip and makes the electrical connections. The MC series provides inductance values from 10nH to 700nH, operating frequencies from 100 MHz, and self resonant frequencies from 650 MHz to 4.6 GHz. Constructed of 47 AWG wire rated at +130 deg C, Piconics MC series microelectronic air core chokes are available with 2 to 100 turns for standard models. Special models can also be provided. Applications include oscillators, mixers, switches, strip line devices, broadband modulators, power supplies, filters and frequency multipliers. MC Series combine the benefits of high frequency, performance of a miniaturized air coil in combination with a surface mountable alumina substrate. Applications range from fiber optic communication links to microwave radio systems.

FEATURES:

- Minimum Height
- Surface Mountable
- Ease of Handling

ABSOLUTE MAXIMUM RATINGS:

- Operating temperature: -55° C to +125° C
- Storage temperature: -55° C to +125° C
- Temperature raise(at 90° C): 35° C
- Maximum Operating Temperature: 125° C
- Maximum Current 100 ma DC

PHYSICAL CHARACTERISTICS:

- Air Core
- Aluminum Substrate Base
- Gold Plated Contacts over Nickel

OPTIONS AVAILABLE:

- Optional wire sizes available.
- Tinned terminations available.

Part number	LnH +/- 10%	Q Min	Test Freq Mhz	SRF Min GHZ	DCR Max Ohms
MC2T47PW	8	21	200	4.6	0.16
MC3T47PW	11	24	200	3.7	0.18
MC5T47PW	21	26	200	2.7	0.26
MC8T47PW	36	21	100	1.8	0.33
MC10T47PW	47	22	100	1.5	0.43
MC15T47PW	76	23	100	1.2	0.55
MC20T47PW	110	24	100	1.0	0.78
MC25T47PW	140	17	25	.97	0.91
MC30T47PW	170	17	25	.94	1.1
MC35T47PW	205	17	25	.91	1.3
MC40T47PW	240	17	25	.88	1.4
MC45T47PW	282	17	25	.87	1.6
MC50T47PW	320	17	25	.87	1.8
MC55T47PW	343	17	25	.86	1.9
MC60T47PW	388	17	25	.85	2.0
MC65T47PW	415	17	25	.85	2.2
MC70T47PW	450	17	25	.84	2.3
MC75T47PW	485	17	25	.80	2.5
MC80T47PW	530	17	25	.78	2.7
MC85T47PW	565	17	25	.75	2.9
MC90T47PW	615	17	25	.73	3.0
MC95T47PW	651	17	25	.70	3.2
MC100T47PW	700	17	25	.65	3.4

