



MICRO LAMBDA WIRELESS, INC.

MLFR SERIES OCTAVE BAND YIG BAND REJECT FILTERS 2-18 GHz

FEATURES

- 2-18 GHz Frequency Coverage
- Excellent Linearity
- 1.4" Cube Package
- Up to 16 Stages



DESCRIPTION

The MICRO LAMBDA **MLFR**-Series of Band Reject filters cover the frequency range of 2 GHz to 18 GHz. These filters offer excellent notch depth and precise bandwidths for rejection of unwanted signals. Standard frequency bands of 2 GHz to 4 GHz, 4 GHz to 8 GHz, 8 GHz to 12 GHz and 12 GHz to 18 GHz are provided. 3 dB bandwidths from 100 MHz to 150 MHz with 40 dB bandwidths of 10 to 25 MHz are available in standard designs. Modified 3 dB and 40 dB bandwidths are available on special order. These filters are well suited for broadband receivers and a variety of EW system applications. Standard configuration of 1.4" cubes are provided and can also be ordered with an Analog or Digital Driver.

ELECTRICAL AND PERFORMANCE SPECIFICATIONS

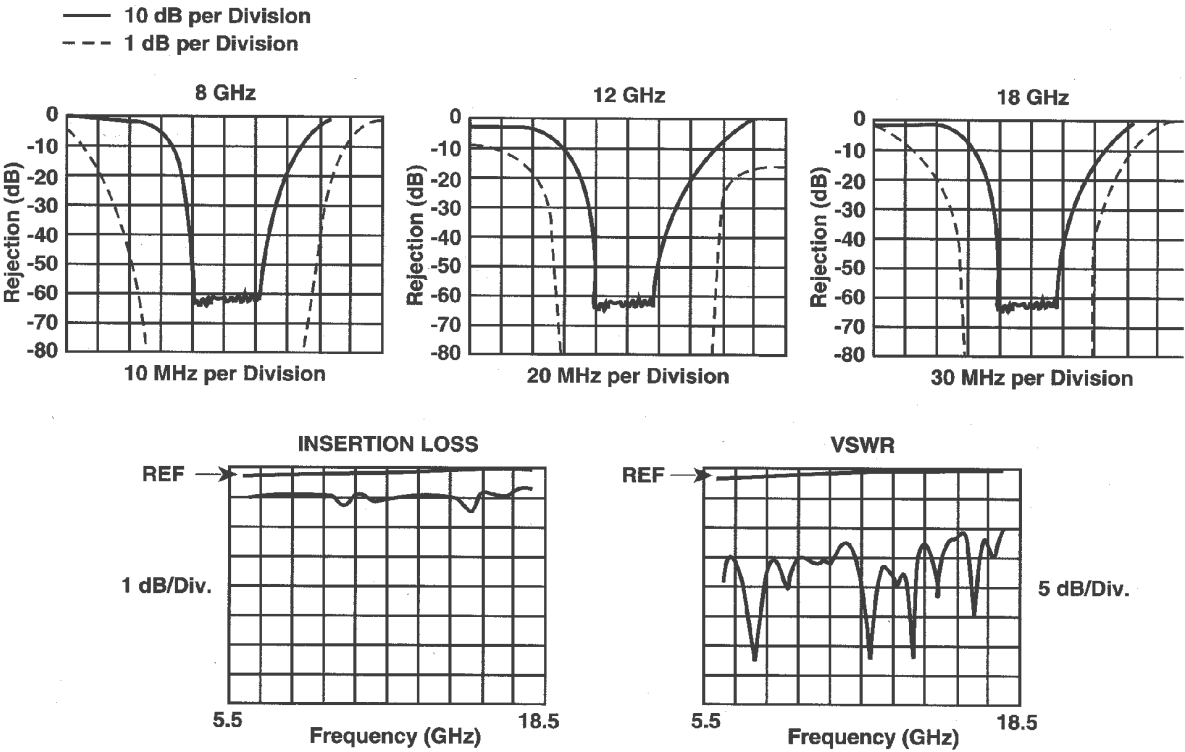
Guaranteed Specifications at -0° to $+65^{\circ}$ C Case Temperature ^(Note 1)

Model No.	MLFR-0204	MLFR-0408	MLFR-0812	MLFR-1218
Frequency Range, Min.	2-4 GHz	4-8 GHz	8-12.4 GHz	12.4-18 GHz
Reject Bandwidth				
@ 40 dB, Min.	15 MHz	20 MHz	25 MHz	25 MHz
@ 3 dB, Max.	125 MHz	150 MHz	150 MHz	150 MHz
Passband VSWR, Max.	2:1	2:1	2:1	2:1
Passband Insertion Loss, Max.	1.5 dB	1.5 dB	1.5 dB	1.5 dB
Passband Range	DC-8 GHz	DC-10 GHz	DC-18 GHz	DC-18 GHz
Spurious, Max	4 dB	4 dB	4 dB	4 dB
Limiting Level, Min.	+10 dBm	+10 dBm	+13 dBm	+13 dBm
Max. Input Power, No Damage.	+30 dBm	+30 dBm	+30 dBm	+30 dBm
Tuning Coil Characteristics				
Tuning Sensitivity, Typ.	20 MHz/mA	20 MHz/mA	20 MHz/mA	20 MHz/mA
Linearity, Max.	+/- 3 MHz	+/- 5 MHz	+/- 5 MHz	+/- 5 MHz
Hysteresis, Typ.	4 MHz	4 MHz	5 MHz	8 MHz
Temperature Drift (0 to 60 deg. C), Max.	8 MHz	10 MHz	12 MHz	15 MHz
Coil Resistance, Typ.	7 Ohms	7 Ohms	6 Ohms	6 Ohms
Coil Inductance, Typ.	70 mH	70 mH	60 mH	60 mH
Heater Voltage	+28 Vdc	+28 Vdc	+28 Vdc	+28 Vdc
Heater Current-Surge, Max. @ 25 deg. C.	300 mA	300 mA	300 mA	300 mA
Steady State @ 25 deg. C.	100 mA	100 mA	100 mA	100 mA
Case Style ^(Note 2)	21-018	21-018	21-018	21-018

Note: 1.) Extended temp. range available.

2.) 1.7" Case available.

Performance Graphs (Typical)



CASE DRAWING 21-018 / 21-019

