

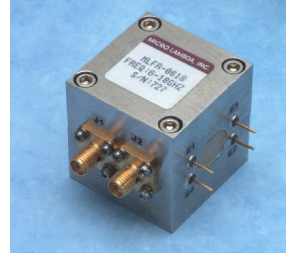


MICRO LAMBDA WIRELESS, INC.

MLFR SERIES WIDE BAND YIG BAND REJECT FILTERS 2-20 GHz

FEATURES

- 2-18 and 2-20 GHz Full Band 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 and 2 GHz to 20 GHz. These filters offer excellent notch depth and precise bandwidths for rejection of unwanted signals. 3 dB bandwidths are 150 MHz with 40 dB bandwidths of 5 to 10 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, TTL Digital or Serial Driver.

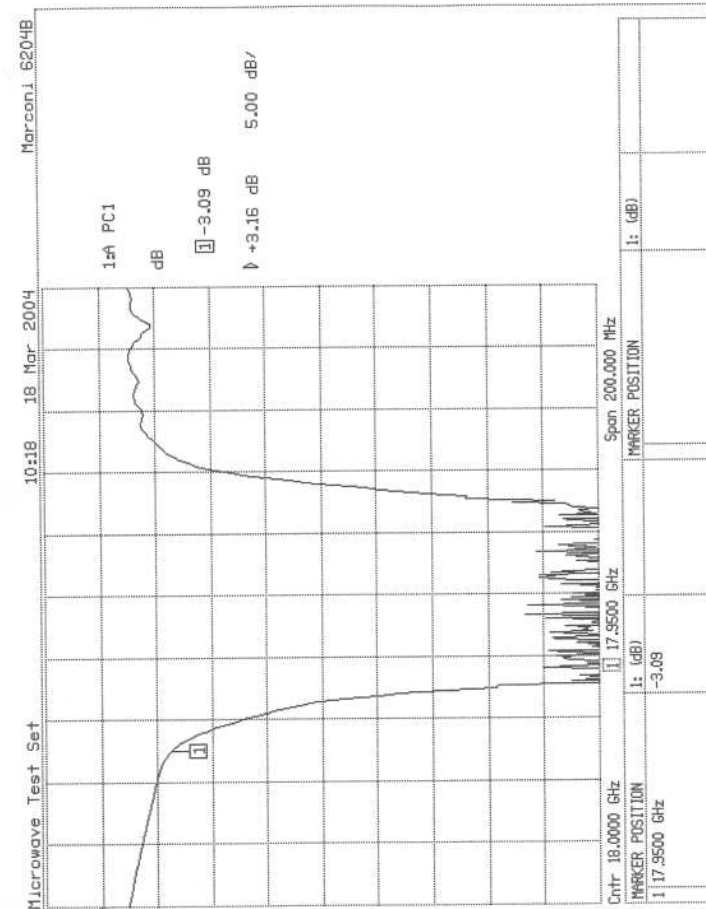
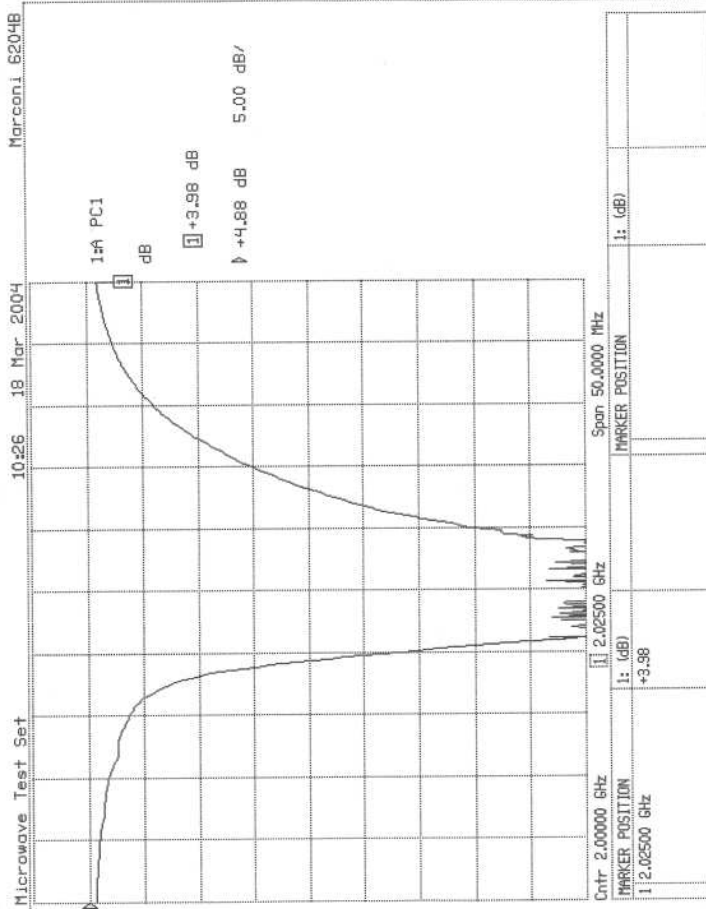
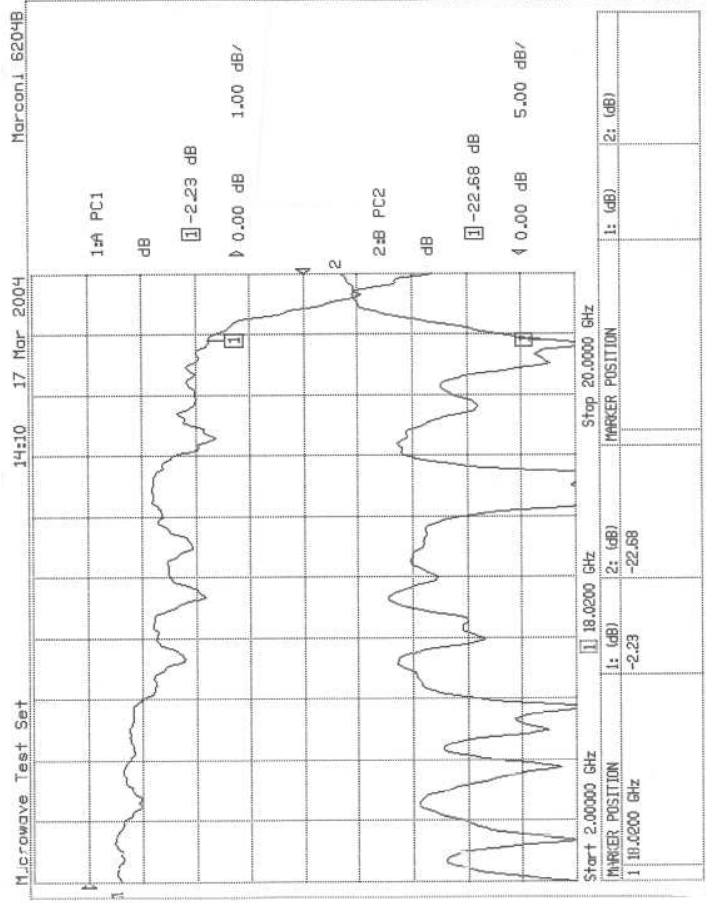
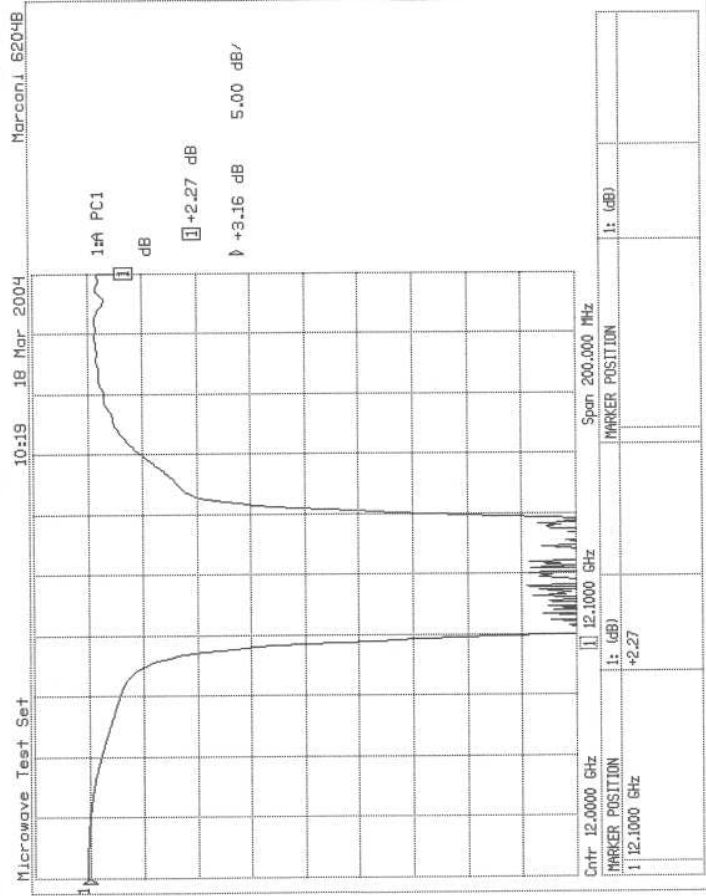
ELECTRICAL AND PERFORMANCE SPECIFICATIONS

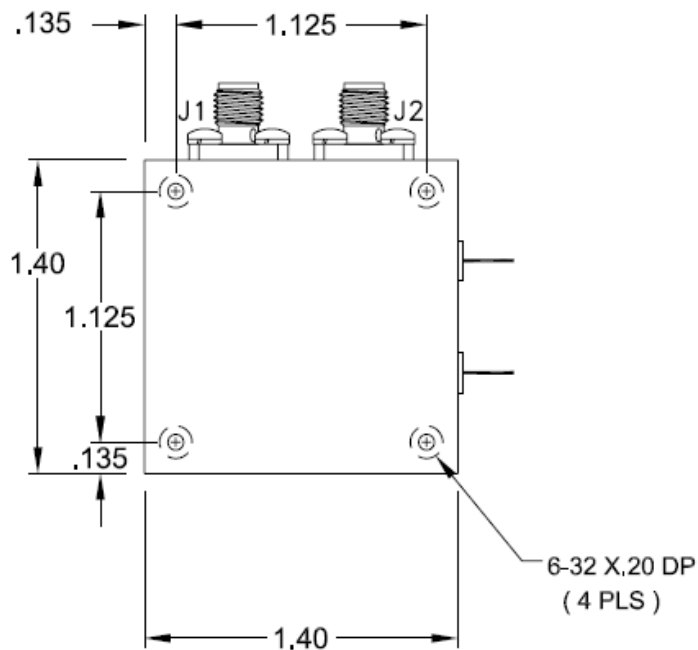
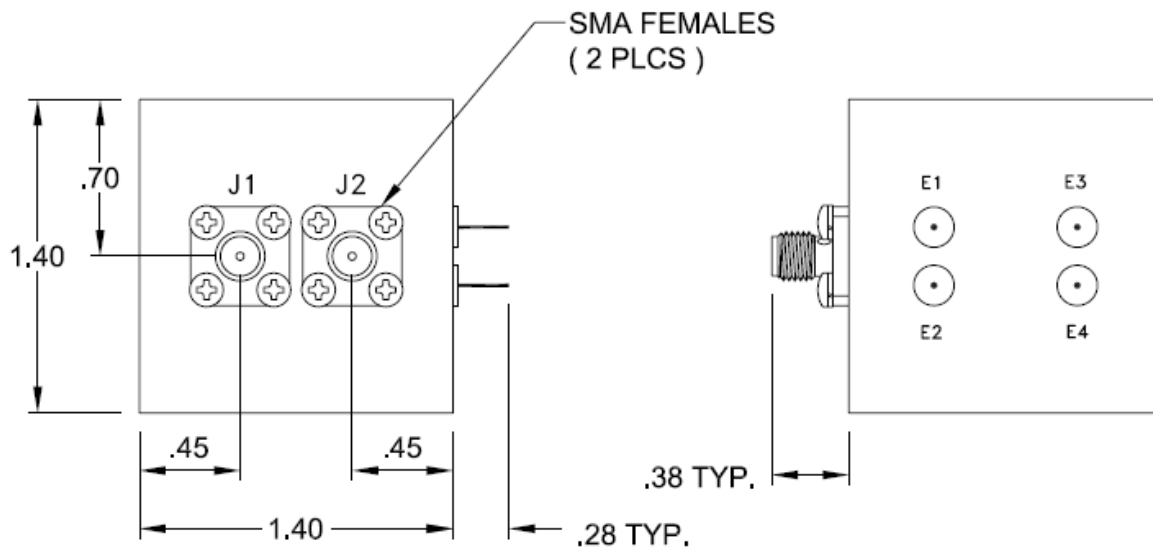
Guaranteed Specifications at -0° to $+65^{\circ}$ C Case Temperature ^(Note 1)

Model No.	MLFR-0218	MLFR-0220
Frequency Range, Min.	2-18 GHz	2-20 GHz
Reject Bandwidth		
@ 40 dB, Min.	10 MHz @ 2.0 GHz	5 MHz @ 2.0 GHz
	50 MHz @ 18.0 GHz	40 MHz @ 20 GHz
@ 3 dB, Max.	150 MHz	150 MHz
Passband VSWR, Max.	2:1	2:1
Passband Insertion Loss, Max.	2 dB	2 dB
Passband Range	DC-18 GHz	DC-20 GHz
Spurious, Max	4 dB	4 dB
Limiting Level, Min.	+10 dBm	+10 dBm
Max. Input Power, No Damage.	+28 dBm	+28 dBm
Tuning Coil Characteristics		
Tuning Sensitivity, Typ.	20 MHz/mA	20 MHz/mA
Linearity, Max.	+/- 6 MHz	+/- 6 MHz
Hysteresis, Typ.	15 MHz	17 MHz
Temperature Drift (0 to 60 deg. C), Max.	12 MHz	15 MHz
Coil Resistance, Typ.	8 Ohms	8 Ohms
Coil Inductance, Typ.	60 mH	60 mH
Heater Voltage	+28 Vdc	+28 Vdc
Heater Current-Surge, Max. @ 25 deg. C.	300 mA	300 mA
Steady State @ 25 deg. C.	100 mA	100 mA
Case Style ^(Note 2)	21-018	21-018

Note: 1.) Extended Temp. Range Available.

2.) 1.7" Case available.





CONN	FUNCTIONS
J1	RF IN
J2	RF OUT
E1	+ COIL
E2	+ HEATER
E3	- HEATER
E4	- COIL

* POSITION OF E1 & E4
SELECTED AT FACTORY
FOR COIL POLARITY

WEIGHT : 13 Oz. MAX

UNLESS OTHERWISE SPECIFIED DIMENSIONS
ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
▲ .005 ▲ .010 ▲ .005

CONTRACT NO.

APPROVALS DATE

DRAWN N. NGUYEN 10/21/05

CHECKED

ISSUED



MICRO LAMBDA WIRELESS, INC.

BAND REJECT FILTER (1.4")

SIZE

CAGE No
ORN63

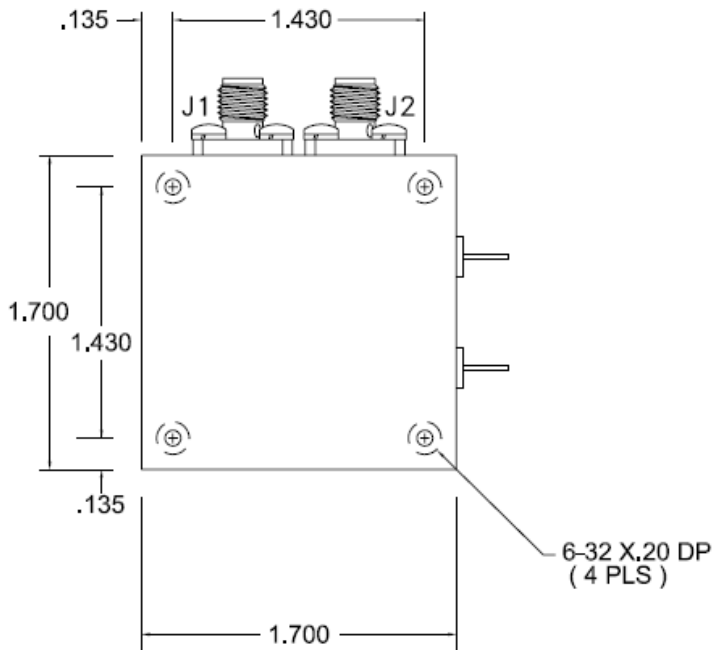
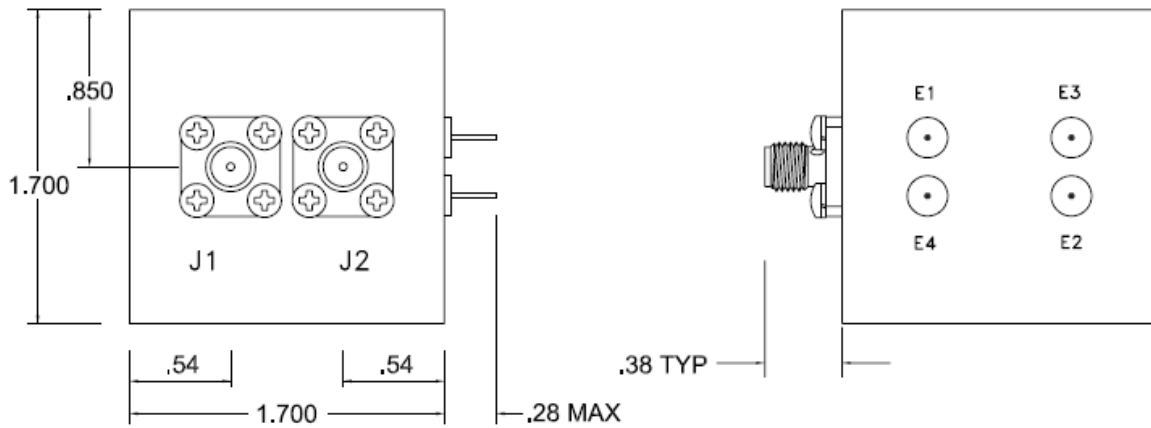
DWG. NO.

21 - 018

REV.

C

DO NOT SCALE DRAWING



CONN	FUNCTIONS
J1	RF IN
J2	RF OUT
E1	+ COIL
E2	- COIL
E3	HEATER
E4	HEATER

* POSITION OF E1 & E2
SELECTED AT FACTORY FOR
COIL POLARITY

WEIGHT : 16 Oz. MAX

UNLESS OTHERWISE SPECIFIED DIMENSIONS
ARE IN INCHES
TOLERANCE ARE :
FRACTIONS DECIMALS ANGLES
▲ .010
▲ .005

CONTRACT NO.



MICRO LAMBDA WIRELESS, INC.

MATERIAL
CARPENTER 49

APPROVALS

DATE

DRAWN N. NGUYEN

5/31/07

CHECKED

ISSUED

BAND REJECT FILTER (1.7")

FINISH

SIZE

CAGE No.
0RN63

DWG. NO.

21 - 019

REV.

B

DO NOT SCALE DRAWING