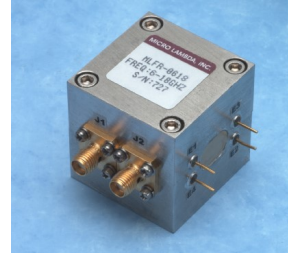




FEATURES

- .5-20 GHz Frequency Coverage
- Excellent Linearity
- 1.4" Cube Package
- Up to 16 Stages



DESCRIPTION

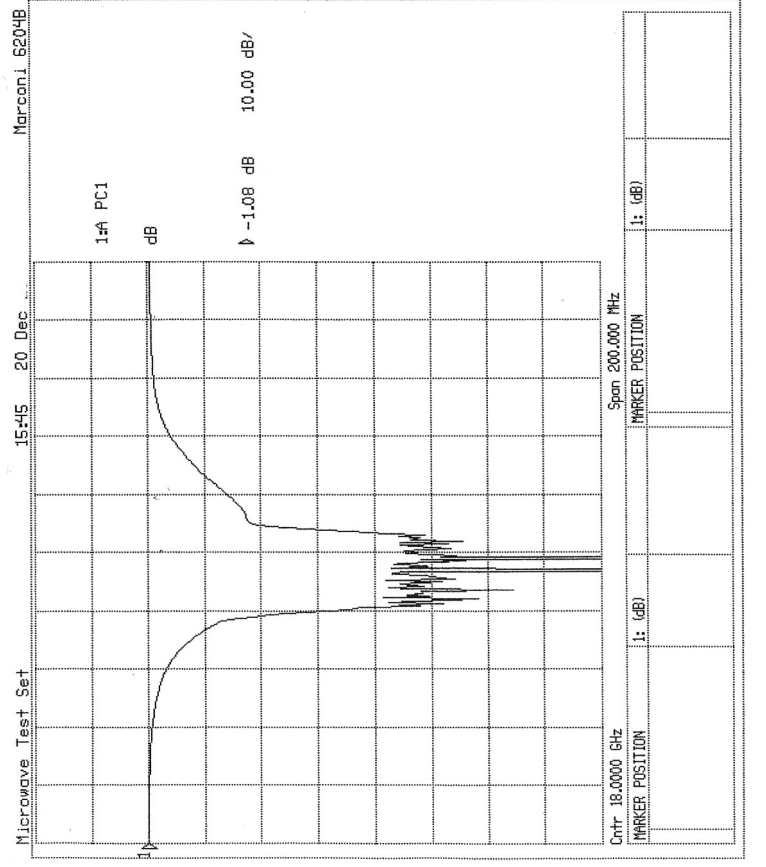
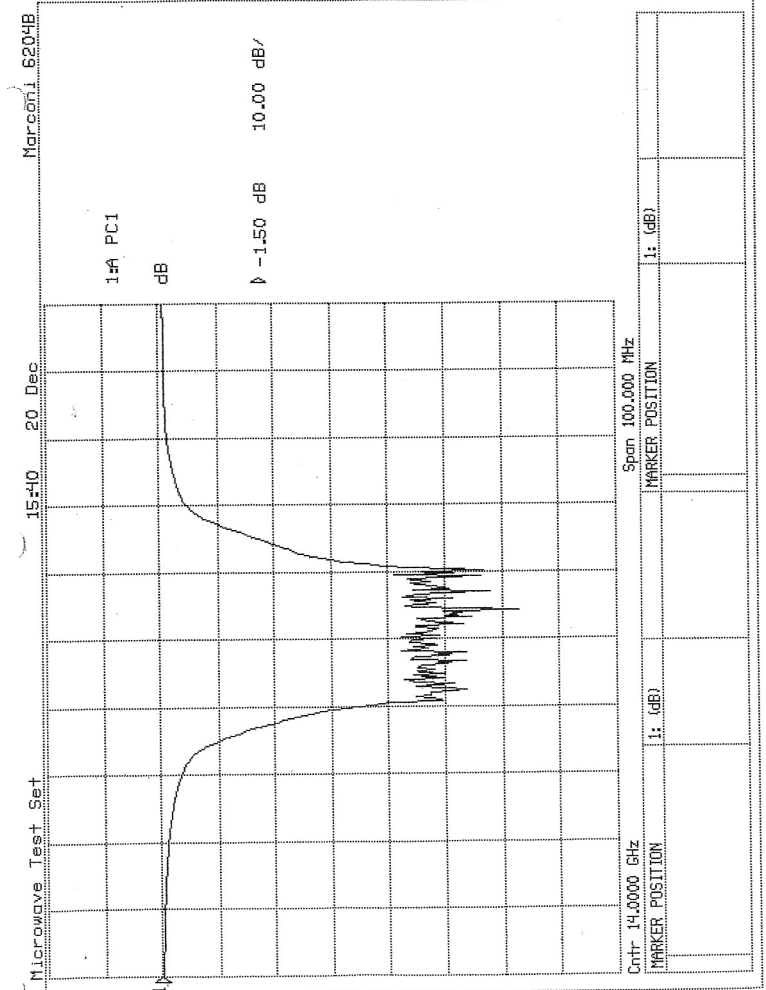
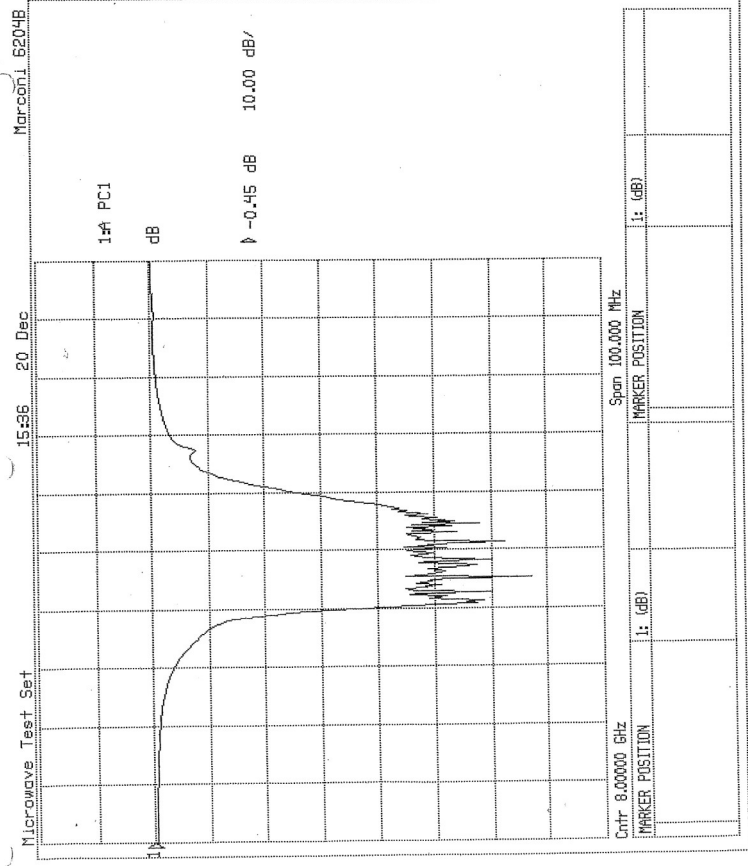
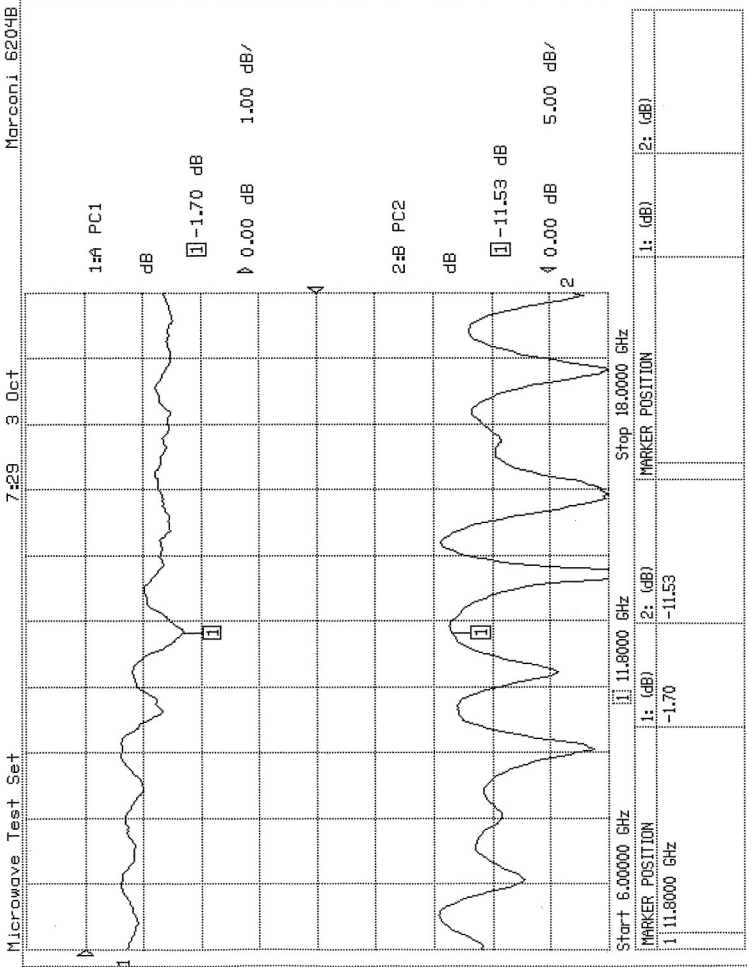
The MICRO LAMBDA MLFR-Series of Band Reject filters cover the frequency range of .5 GHz to 20 GHz. These filters offer excellent notch depth and precise bandwidths for rejection of unwanted signals. Standard frequency bands of .5 GHz to 2 GHz, 2 GHz to 6 GHz, 2 GHz to 8 GHz, 6 GHz to 18 GHz and 6 GHz to 20 GHz are provided. 3 dB bandwidths are 150 MHz with 40 dB bandwidths of 5 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.

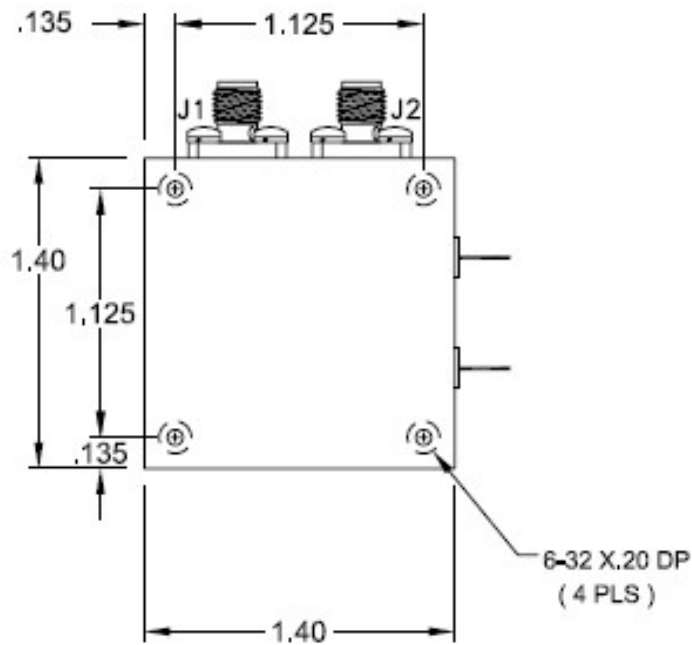
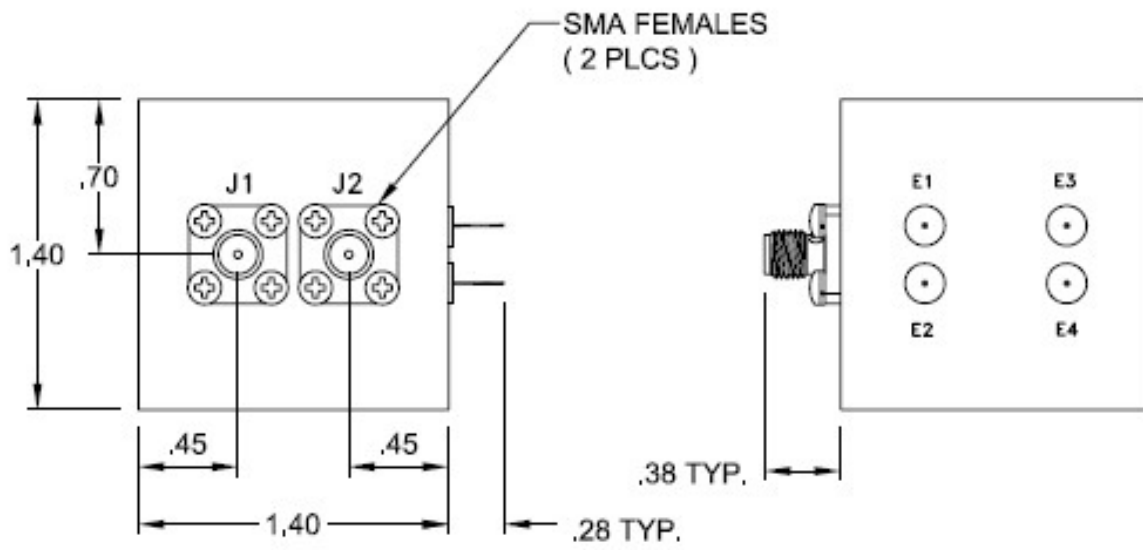
ELECTRICAL AND PERFORMANCE SPECIFICATIONS

Guaranteed Specifications at -0° to +65° C Case Temperature ^(Note 1)

Model No.	MLFR-0502	MLFR-0208	MLFR-0212	MLFR-0618	MLFR-0620
Frequency Range, Min.	.5-2 GHz	2-8 GHz	2-12 GHz	6-18 GHz	6-20 GHz
Reject Bandwidth					
@ 30 dB, Min. (.5-.65 GHz)	5 MHz	-	-	-	-
@ 40 dB, Min. (> .65 GHz)	7 MHz	15 MHz	10 MHz	25 MHz	30 MHz
@ 3 dB, Max.	100 MHz	150 MHz	150 MHz	150 MHz	150 MHz
Passband VSWR, Max.	2:1	2:1	2:1	2:1	2:1
Passband Insertion Loss, Max.	2.0 dB	1.5 dB	1.5 dB	1.75 dB	1.75 dB
Passband Range	DC-3 GHz	DC-10 GHz	DC-18 GHz	DC-18 GHz	DC-20 GHz
Spurious, Max	4 dB	4 dB	4 dB	4 dB	4 dB
Limiting Level, Min.	0 dBm	+10 dBm	+10 dBm	+13 dBm	+10 dBm
Max. Input Power, No Damage.	+28 dBm	+28 dBm	+28 dBm	+28 dBm	+28 dBm
Tuning Coil Characteristics					
Tuning Sensitivity, Typ.	20 MHz/mA	20 MHz/mA	20 MHz/mA	20 MHz/mA	20 MHz/mA
Linearity, Max.	+/- 3 MHz	+/- 5 MHz	+/- 5 MHz	+/- 5 MHz	+/- 5 MHz
Hysteresis, Typ.	2 MHz	6 MHz	10 MHz	12 MHz	12 MHz
Temperature Drift (0 to 60 deg. C), Max.	8 MHz	10 MHz	12 MHz	15 MHz	15 MHz
Coil Resistance, Typ.	8 Ohms	7 Ohms	7 Ohms	6 Ohms	6 Ohms
Coil Inductance, Typ.	80 mH	70 mH	70 mH	60 mH	60 mH
Heater Voltage	+28 Vdc	+28 Vdc	+28 Vdc	+28 Vdc	+28 Vdc
Heater Current-Surge, Max. @ 25 deg. C.	300 mA	300 mA	300 mA	300 mA	300 mA
Steady State @ 25 deg. C.	100 mA	100 mA	100 mA	100 mA	100 mA
Case Style ^(Note 2)	21-018	21-018	21-018	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

ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES
TOLERANCES ARE:

FRACTIONS DECIMALS ANGLES
• .005 .00125 .00125

UNLESS

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS

DATE

DRAWN NJGLYER 10/21/05

CHECKED

ISSUED



MICRO LAMBDA WIRELESS, INC.

BAND REJECT FILTER (1.4")

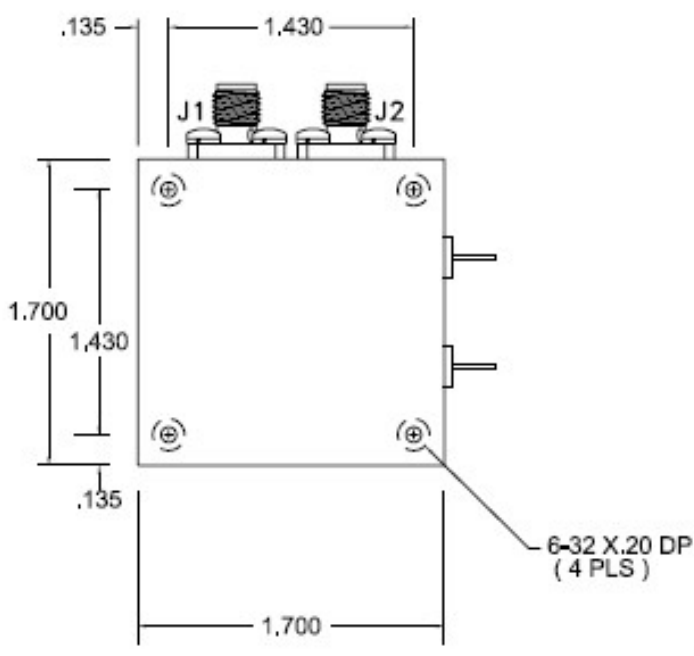
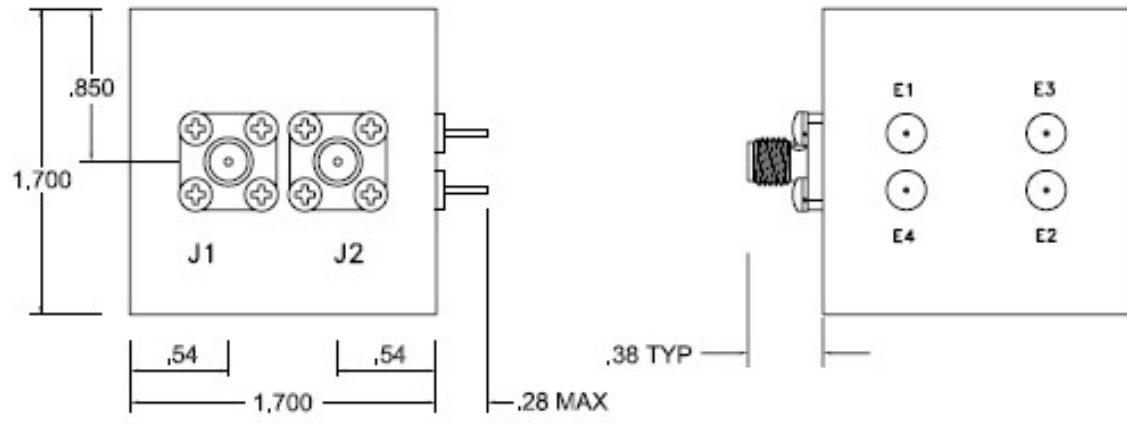
REV

DATE IN
0RN63

ENG. NO.

21-018

REV. C



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:		CONTRACT NO.	
FRACTIONS	DECIMALS	APPROVALS	DATE
±	0.001	DRAWN	5/31/07
MATERIAL: CARPENTER 40		CHECKED	
FINISH		REVISED	
DO NOT SCALE DRAWING			

MICRO LAMBDA WIRELESS, INC.

BAND REJECT FILTER (1.7")

REV	CASE NO. ORN63	DWG. NO. 21-019	REV. B
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