



MICRO LAMBDA WIRELESS, INC.

MLUN SERIES ULTRA NOTCH YIG BAND REJECT FILTERS 500 MHz - 18 GHz

FEATURES

- 500 MHz to 18 GHz Frequency Coverage
- Excellent Linearity
- Superior Notch Depth



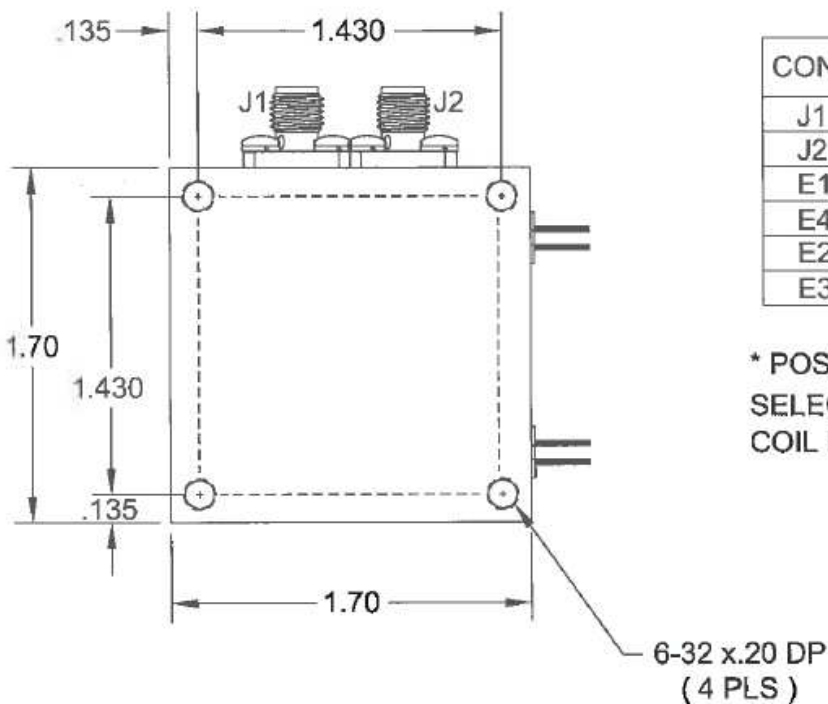
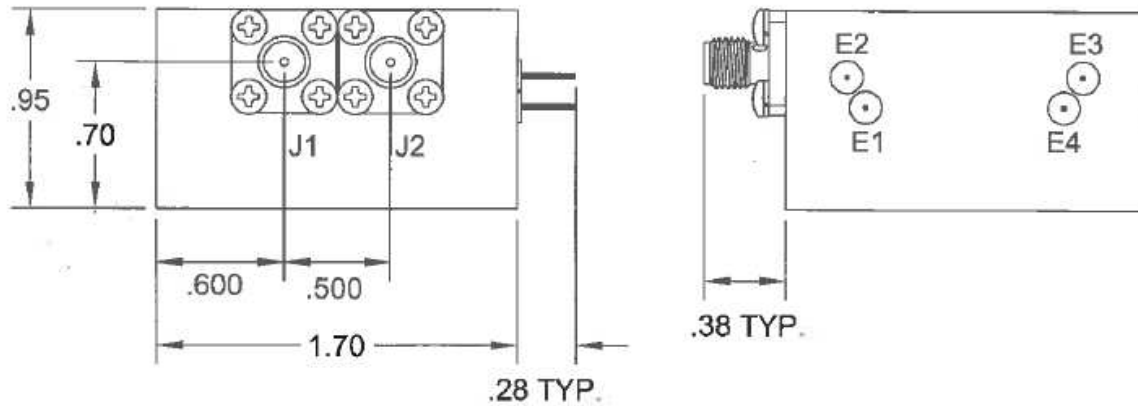
DESCRIPTION

The MICRO LAMBDA MLUN-Series of Band Reject filters cover the frequency range of 500 MHz to 18 GHz in different bands. These filters offer excellent notch depth and precise bandwidths for rejection of unwanted signals. 3 dB bandwidths are 175 MHz with 60 dB bandwidths of 5 to 10 MHz are available in standard designs. These filters are well suited for broadband receivers and a variety of EW system applications. Standard configurations 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

Model No.	MLUN-0502	MLUN-0206	MLUN-0618	MLUN-0218
Frequency Range, Min.	0.5-2 GHz	2-6 GHz	6-18 GHz	2-18 GHz
Reject Bandwidth				
@ 40 dB, Min.	5 MHz	23 MHz	40 MHz	10 MHz
@ 50 dB, Min.	2 MHz	20 MHz	37 MHz	8 MHz
@ 60 dB, Min.		17 MHz	35 MHz	5 MHz
@ 3 dB, Max.	80 MHz	120 MHz	175 MHz	175 MHz
Passband VSWR, Max.	2:1	2:1	2:1	2:1
Passband Insertion Loss, Max.	2.0 dB	2.0 dB	2.3 dB	2.3 dB
Passband Range	DC-3 GHz	DC-6.2 GHz	DC-18.2 GHz	DC-18.2 GHz
Spurious, Max	4 dB	4 dB	4 dB	4 dB
Limiting Level, Min.	+5 dBm	+10 dBm	+10 dBm	+10 dBm
Max. Input Power, No Damage.	+28 dBm	+28 dBm	+28 dBm	+28 dBm
Tuning Coil Characteristics				
Tuning Sensitivity, Typ.	13 MHz/mA	18 MHz/mA	20 MHz/mA	20 MHz/mA
Linearity, Max.	+/- 2 MHz	+/- 3 MHz	+/- 4 MHz	+/- 6 MHz
Hysteresis, Typ.	2 MHz	4 MHz	12 MHz	15 MHz
Temperature Drift (0 to 60 deg. C), Max.	6 MHz	8 MHz	10 MHz	12 MHz
Coil Resistance, Typ.	16 Ohms	13 Ohms	6 Ohms	6 Ohms
Coil Inductance, Typ.	120 mH	120 mH	140 mH	140 mH
Heater Voltage	+28 Vdc	+28 Vdc	+28 Vdc	+28 Vdc
Heater Current-Surge, Max. @ 25 deg. C.	1000 mA	1000 mA	1000 mA	1000 mA
Steady State @ 25 deg. C.	150 mA	150 mA	150 mA	150 mA
Case Style	99-0021-141	99-0021-141	99-0021-145	99-0021-145



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

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

WEIGHT : 10 Oz. MAX

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

CONTRACT NO.



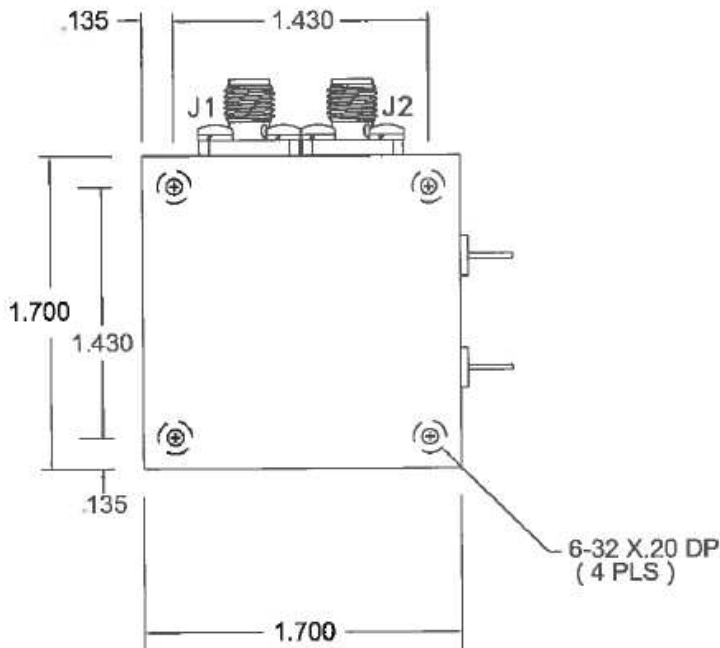
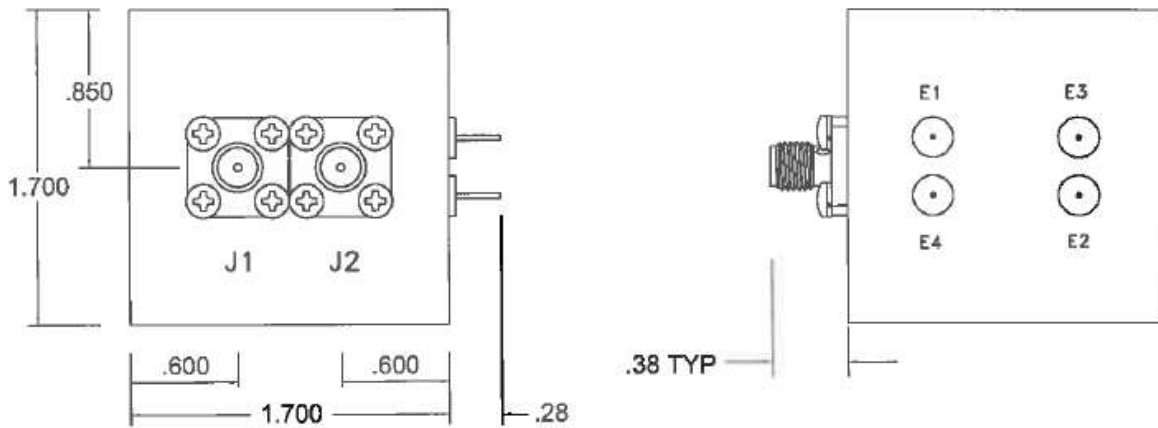
MICRO LAMBDA WIRELESS, INC.

MATERIAL
FINISH
DO NOT SCALE DRAWING

APPROVAL	DATE
DRWN N. NGUYEN	1/28/18
CHECKED	01/28/18
RSVD	

BAND REJECT FILTER (1.7" X .95")

SIZE	CAGE No	DWG. NO	REV.
	ORN63	99 - 0021 - 141	



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
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
± .010 ± .005 ± .005

CONTRACT NO.



MICRO LAMBDA WIRELESS, INC.

MATERIAL

CARPENTER 49

DRAWN

N. NGUYEN

4/26/16

CHECKED

ISSUED

[Signature] 4/16/16

ULTRA NOTCH FILTER (1.7")

FINISH

DO NOT SCALE DRAWING

SIZE

CAGE #
ORN63

DWG. NO.

99 - 0021 - 145

REV

A