



# MICRO LAMBDA WIRELESS, INC.

## MLUN SERIES ULTRA NOTCH YIG BAND REJECT FILTERS 350 MHz - 20 GHz

### FEATURES

- 350 MHz to 20 GHz Frequency Coverage
- Excellent Linearity
- Superior Notch Depth



### DESCRIPTION

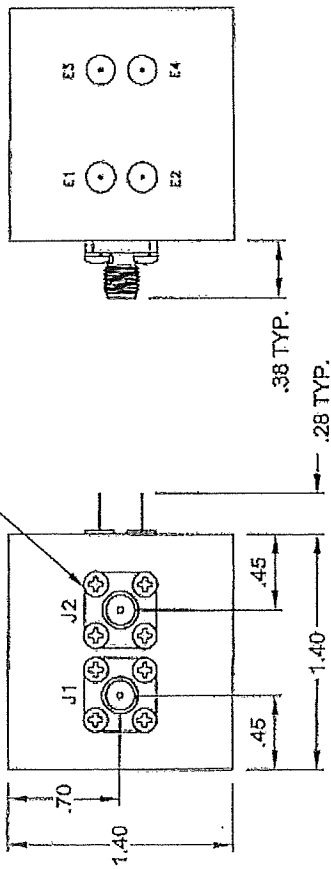
The MICRO LAMBDA **MLUN**-Series of Band Reject filters cover the frequency range of 350 MHz to 20 GHz in different bands. These filters offer excellent notch depth and precise bandwidths for rejection of unwanted signals. 3 dB bandwidths are 50 to 175 MHz with 60 dB bandwidths of 5 to 10 MHz in standard designs. These filters are well suited for broadband receivers and a variety of EW system applications. Standard configuration 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° C Case Temperature

Model No.	MLUN-0305	MLUN-0503	MLUN-0206	MLUN-0618	MLUN-0218	MLUN-0220
Frequency Range, Min.	0.35-0.52 GHz	0.5-3 GHz	2-6 GHz	6-18 GHz	2-18 GHz	2-20 GHz
Reject Bandwidth						
@ 30 dB, Min.	4 MHz					
@ 40 dB, Min.		6 MHz	30 MHz	60 MHz	25 MHz	25 MHz
@ 50 dB, Min.		2 MHz	25 MHz	45 MHz	15 MHz	15 MHz
@ 60 dB, Min.			20 MHz	40 MHz	10 MHz	10 MHz
@ 3 dB, Max.	50 MHz	80 MHz	120 MHz	175 MHz	175 MHz	175 MHz
Passband VSWR, Max.	2:1	2:1	2:1	2:1	2:1	2.5:1
Passband Insertion Loss, Max.	1.8 dB	1.8 dB	1.8 dB	2.0 dB	2.0 dB	2.1 dB
Passband Range	DC-2 GHz	DC-3 GHz	DC-6.2 GHz	DC-18.2 GHz	DC-18.2 GHz	DC-20 GHz
Spurious, Max	4 dB	4 dB	4 dB	4 dB	4 dB	4 dB
Limiting Level, Min.	0 dBm	+5 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm
Max. Input Power, No Damage.	+28 dBm	+28 dBm	+28 dBm	+28 dBm	+28 dBm	+28 dBm
Tuning Coil Characteristics						
Tuning Sensitivity, Typ.	13 MHz/mA	13 MHz/mA	18 MHz/mA	19 MHz/mA	19 MHz/mA	19 MHz/mA
Linearity, Max.	+/- 2 MHz	+/- 2 MHz	+/- 3 MHz	+/- 4 MHz	+/- 6 MHz	+/- 6 MHz
Hysteresis, Typ.	2 MHz	2 MHz	4 MHz	12 MHz	15 MHz	15 MHz
Temperature Drift (0 to 60 deg. C), Max.	8 MHz	6 MHz	8 MHz	10 MHz	12 MHz	12 MHz
Coil Resistance, Typ.	16 Ohms	16 Ohms	13 Ohms	6 Ohms	6 Ohms	6 Ohms
Coil Inductance, Typ.	120 mH	120 mH	120 mH	140 mH	140 mH	140 mH
Heater Voltage	+28 Vdc	+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	300 mA
Steady State @ 25 deg. C.	150 mA	150 mA	150 mA	150 mA	150 mA	150 mA
Case Style	99-0021-141	99-0021-141	99-0021-141	21-018	21-018	21-018

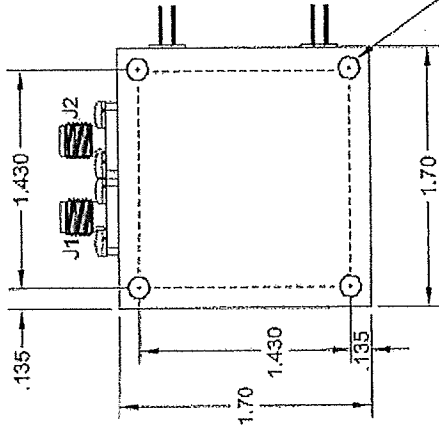
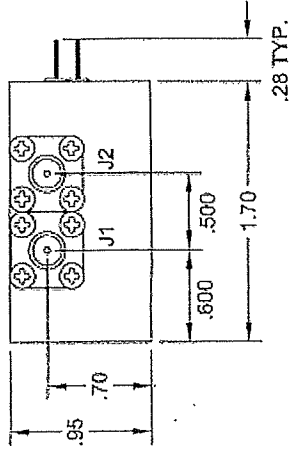
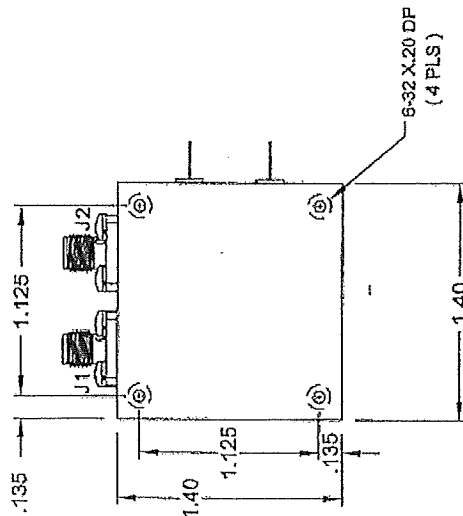
SMA FEMALES  
( 2 PLS )



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



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 : 10.0z. MAX

MILITARY ORDER INFORMATION		DATE	
ORDER NO.	REV.	DATE	REV.
100-000000	1	10/1/61	C
MILITARY ORDER INFORMATION		DATE	
ORDER NO.	REV.	DATE	REV.
100-000000	1	10/1/61	C
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100-000000	1	10/1/61	C

MICRO LAMBDA WIRELESS, INC.

BAND REJECT FILTER ( 1.4" )

ORNG3

21-018

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ORDER NO.	REV.	DATE	REV.
100-000000	1	10/1/61	C
MILITARY ORDER INFORMATION		DATE	
ORDER NO.	REV.	DATE	REV.
100-000000	1	10/1/61	C

MICRO LAMBDA WIRELESS, INC.

BAND REJECT FILTER ( 1.7" X .95" )

ORNG3

99-0023-141