



FEATURES

- 1.0-8.0 GHz Frequency Coverage
- 6 Stage Version
- Excellent Linearity
- Miniature Size



DESCRIPTION

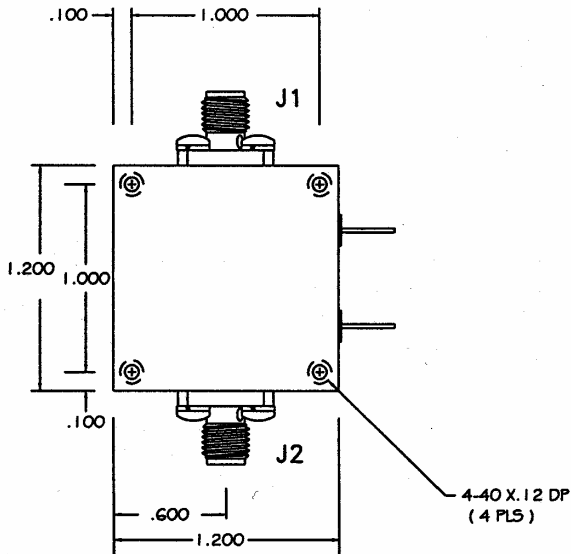
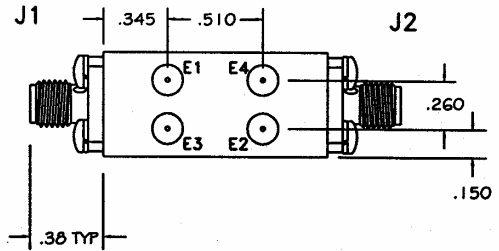
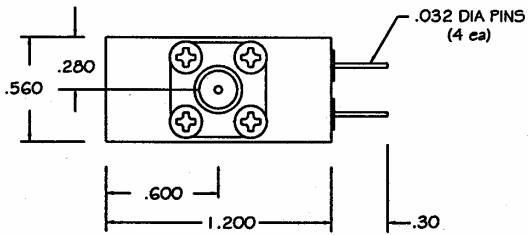
The MICRO LAMBDA MLFI-Series of Miniature YIG filters cover the frequency range of 1 GHz to 8 GHz and are available with 25 MHz minimum 3 dB bandwidths. They provide excellent linearity, low insertion loss and flat response over the frequency range. These filters offer the user the ability to reduce the size of current system designs as well as next generation system designs. This miniature line of filters are ideal for use in portable test sets, VXI base instruments, miniature receivers, and small microwave test equipment applications.

ELECTRICAL AND PERFORMANCE SPECIFICATIONS

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

Model No.	MLFI-61002	MLFI-62004	MLFI-64008	MLFI-62008
Frequency Range, Min.	1-2 GHz	2-4 GHz	4-8 GHz	2-8 GHz
No. of Stages	6	6	6	6
3dB Bandwidth, Min.	25 MHz	40 MHz	45 MHz	40 MHz
Insertion Loss, Max.	6 dB	6 dB	4 dB	5 dB
Passband Spurs & Ripple, Max.	2.0 dB	2.0 dB	2.0 dB	2.0 dB
Passband VSWR, Max.	2:1	2:1	2:1	2:1
Selectivity, Typ.	36 dB/ Octave	36 dB/ Octave	36 dB/ Octave	36 dB/ Octave
Off Resonance Isolation, Min.	100 dB	100 dB	100 dB	100 dB
Off Resonance Spurious, Min.	70 dB	70 dB	70 dB	70 dB
Limiting Level, Min.	0 dBm	+10 dBm	+10 dBm	+10 dBm
Tuning Coil Characteristics				
Tuning Sensitivity, Typ.	20 MHz/mA	20 MHz/mA	20 MHz/mA	20 MHz/mA
Linearity, Max.	+/- 2 MHz	+/- 3 MHz	+/- 4 MHz	+/- 5 MHz
Hysteresis, Typ.	2 MHz	4 MHz	5 MHz	6 MHz
Temperature Drift, Max.	8 MHz	10 MHz	15 MHz	15 MHz
Coil Resistance, Typ.	12 Ohms	12 Ohms	12 Ohms	12 Ohms
Coil Inductance, Typ.	22 mH	22 mH	22 mH	22 mH
Heater Voltage	20-30 Vdc	20-30 Vdc	20-30 Vdc	20-30 Vdc
Heater Current-Surge, Max. @ 25 deg. C.	350 mA	350 mA	350 mA	350 mA
Steady State @ 25 deg. C.	100 mA	100 mA	100 mA	100 mA
Case Style	21-033	21-033	21-033	21-033


Note: Modified 3 dB Bandwidths Available.



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 : 3 Oz. MAX

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE ARE :			CONTRACT NO.		 MICRO LAMBDA, INC. 4037 CLIPPER STREET, FREMONT, CA. 94538 *** PHONE (510) 770-9221
FRACTIONS	DECIMALS	ANGLES	APPROVALS	DATE	
1/16	0.000	0.010	DRAWN	N. NGUYEN	5/11/98
MATERIAL			CHECKED	<i>[Signature]</i>	5/11/98
FINISH			ISSUED		
DO NOT SCALE DRAWING			SIZE	CAGE No	DWG. NO.
				ORN63	21 - 033
					REV. B