

FEATURES

- 0.5-26.5 GHz Frequency Coverage
- Excellent Linearity
- High Selectivity (42 dB/Octave Skirt)


DESCRIPTION

The MICRO LAMBDA MLFP-Series 7-stage YIG bandpass filters provide high selectivity in a standard 1.7" package size. These filters offer excellent image rejection with customer selected 3 dB bandwidths. Standard frequency bands include 0.5-2 GHz, 2-8 GHz, 2-18 GHz, 2-26.5 GHz, 6-18 GHz and 8-20 GHz frequency coverage with 3 dB bandwidths from 20-500 MHz. They provide excellent linearity, low frequency drift and very flat response over the frequency range. These filters are suited for very sensitive broadband receivers, down-converters and a variety of microwave test equipment.

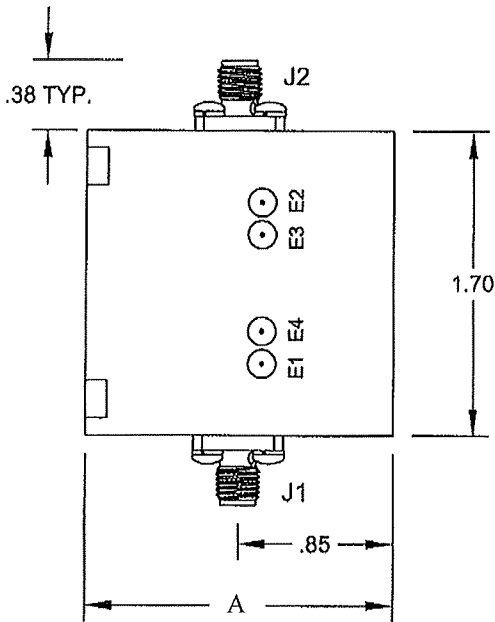
ELECTRICAL AND PERFORMANCE SPECIFICATIONS

Guaranteed Specifications at -0° to $+65^{\circ}$ C Case Temperature (Note 2)

Model No.	MLFP-70520	MLFP-72008	MLFP-72018	MLFP-72026	MLFP-76018	MLFP-78020
Frequency Range, Min.	0.5-2.0	2-8 GHz	2-18 GHz	2-26.5 GHz	6-18 GHz	8-20 GHz
No. of Stages	7	7	7	7	7	7
3dB Bandwidth, Min. (Note 1)	20 MHz	50 MHz	50 MHz	30 MHz	500 MHz	500 MHz
Insertion Loss, Max.	10.0 dB	7.0 dB	7.0 dB	9.0 dB	7.5 dB	6.5 dB
Passband Spurs & Ripple, Max.	2 dB	2 dB	2 dB	2.5 dB	2.5 dB	2.5 dB
Passband VSWR, Max.	2:1	2:1	2:1	2:1	2:1	2:1
Selectivity, Typ.	42 dB/ Octave	42 dB/ Octave	42 dB/ Octave	42 dB/ Octave	42 dB/ Octave	42 dB/ Octave
Off Resonance Isolation, Min.	80 dB	100 dB	100 dB	100 dB	100 dB	100 dB
Off Resonance Spurious, Min.	60 dB	70 dB	70 dB	70 dB	70 dB	70 dB
Limiting Level, Min.	+0 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm
Tuning Coil Characteristics						
Tuning Sensitivity, Typ.	20 MHz/mA	20 MHz/mA	20 MHz/mA	30 MHz/mA	20 MHz/mA	20 MHz/mA
Linearity, Max.	+/- 6 MHz	+/- 8 MHz	+/- 15 MHz	+/- 30 MHz	+/- 25 MHz	+/- 30 MHz
Hysteresis, Typ.	4 MHz	10 MHz	20 MHz	20 MHz	20 MHz	20 MHz
Temperature Drift, Max.	10 MHz	15 MHz	30 MHz	30 MHz	30 MHz	30 MHz
Coil Resistance, Typ.	15 Ohms	6 Ohms	6 Ohms	6 Ohms	6 Ohms	6 Ohms
Coil Inductance, Typ.	70 mH	60 mH	60 mH	60 mH	60 mH	60 mH
Heater Voltage	20-30 Vdc	20-30 Vdc	20-30 Vdc	20-30 Vdc	20-30 Vdc	20-30 Vdc
Heater Current-						
Surge, Max. @ 25 deg. C.	500 mA	500 mA	500 mA	500 mA	500 mA	500 mA
Steady State @ 25 deg. C.	100 mA	100 mA	100 mA	100 mA	100 mA	100 mA
Case Style	21-017	21-017	21-017	21-012-1	21-017	21-017

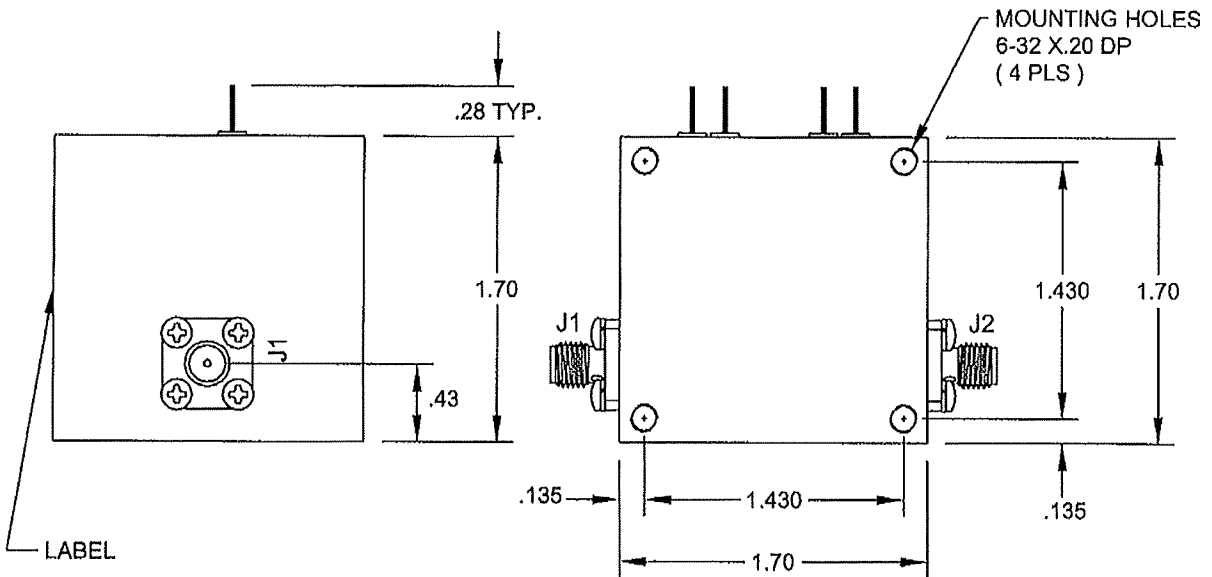
Note: 1) Modified 3 dB Bandwidths available.
2) -54° C to $+85^{\circ}$ temperature available.

CASE DRAWING 21-017 / 21-012-1



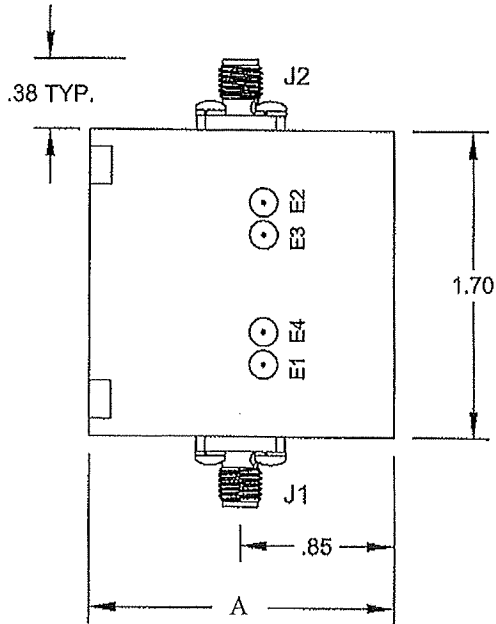
CONN	FUNCTIONS
J1	RF IN
J2	RF OUT
E1	+ COIL
E2	- COIL
E3	HEATER
E4	HEATER

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



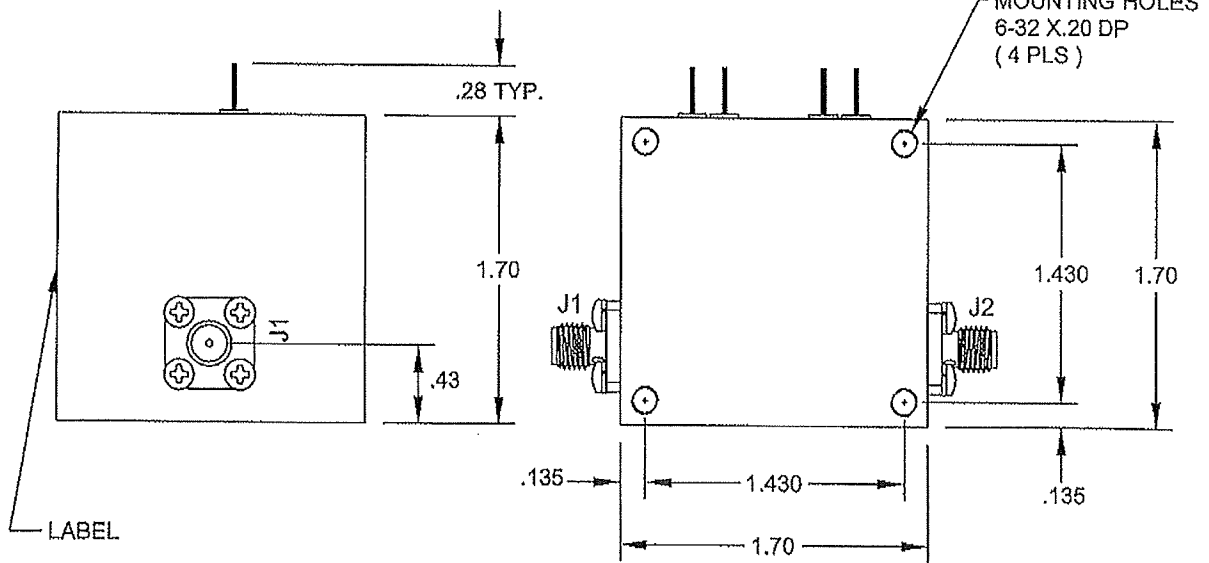
CASE	A	WEIGHT
21-017	1.20	12 oz.
21-012-1	1.70	15 oz.

CASE DRAWING 21-017 / 21-012-1



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J1	RF IN
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E1	+ COIL
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