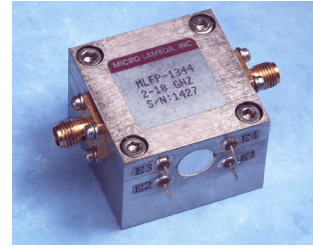


## FEATURES

- .5-26.5 GHz Frequency Coverage
- 2-26.5 GHz Broadband Tuning
- Low Cost and High Reliability
- Industry Standard 1.4 & 1.7 Inch Packages



## DESCRIPTION

The MICRO LAMBDA MLFP Series line of 4-stage YIG tuned bandpass filters cover octave and multioctave frequency bands from .5 to 26.5 GHz. Standard bands such as .5 to 2 GHz, 2 to 18 GHz, 2 to 26.5 GHz, 6 to 18 GHz and 8 to 18 GHz for both the commercial and military user.

Standard YIG tuned filters are specified to operate from 0 to +65°C. However, all Micro Lambda YIG tuned filters can be furnished to military specifications such as MIL-E-5400 and MIL-E-16400 with operating temperature range of -54°C to +85°C.

All filters can be furnished stand alone or with integrated drivers.

## ELECTRICAL AND PERFORMANCE SPECIFICATIONS

Guaranteed Specifications at -0° to +65° C Case Temperature (Note 2)

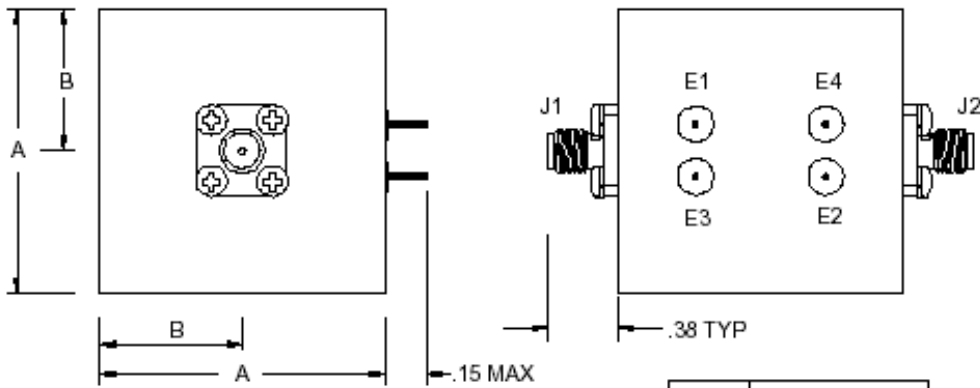
Model No.	MLFP-40520	MLFP-42008	MLFP-42018	MLFP-42026	MLFP-46018	MLFP-48018
Frequency Range, Min.	0.5-2 GHz	2-8	2-18 GHz	2-26.5 GHz	6-18 GHz	8-18 GHz
No. of Stages	4	4	4	4	4	4
3dB Bandwidth, Min. (Note 1)	20 MHz	40 MHz	40 MHz	25 MHz	100 MHz	400 MHz
Insertion Loss, Max.	8 dB	6 dB	6 dB	6 dB	6 dB	6 dB
Passband Spurs & Ripple, Max.	1.5 dB	1.5 dB	1.5 dB	1.5 dB	2.0 dB	2.0 dB
Passband VSWR, Max.	2:1	2:1	2:1	2:1	2:1	2:1
Selectivity, Typ.	24 dB/ Octave	24 dB/ Octave	24 dB/ Octave	24 dB/ Octave	24 dB/ Octave	24 dB/ Octave
Off Resonance Isolation, Min.	80 dB	80 dB	80 dB	60 dB	70 dB	70 dB
Off Resonance Spurious, Min.	50 dB	50 dB	50 dB	40 dB	40 dB	40 dB
Limiting Level, Min.	0 dBm	+5 dBm	+5 dBm	+10 dBm	+10 dBm	+10 dBm
<b>Tuning Coil Characteristics</b>						
Tuning Sensitivity, Typ.	20 MHz/mA	20 MHz/mA	20 MHz/mA	30 MHz/mA	20 MHz/mA	20 MHz/mA
Linearity, Max.	+/- 2 MHz	+/- 10 MHz	+/- 12 MHz	+/- 20 MHz	+/- 10 MHz	+/- 10 MHz
Hysteresis, Typ.	3 MHz	10 MHz	20 MHz	25 MHz	15 MHz	15 MHz
Temperature Drift, Max.	6 MHz	20 MHz	20 MHz	30 MHz	20 MHz	20 MHz
Coil Resistance, Typ.	14 Ohms	5 Ohms	5 Ohms	8 Ohms	5 Ohms	5 Ohms
Coil Inductance, Typ.	60 mH	40 mH	40 mH	150 mH	40 mH	40 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	300 mA	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	100 mA
Case Style (Note 3)	21-015	21-015	21-015	21-013	21-015	21-015

Notes: 1) Modified 3 dB Bandwidths available.

2) -54°C to +85°temperature available .

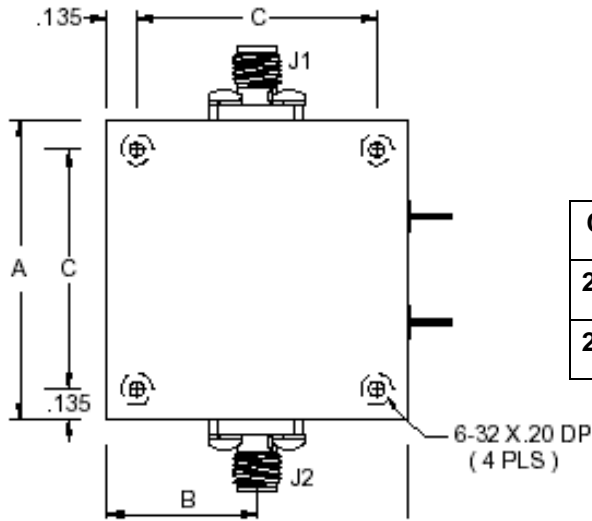
3) 1.7 inch package available.

CASE DRAWING 21-015 /21-013



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	B	C	Weight
21-015	1.400	.700	1.125	13 oz.
21-013	1.700	.850	1.430	15 oz.