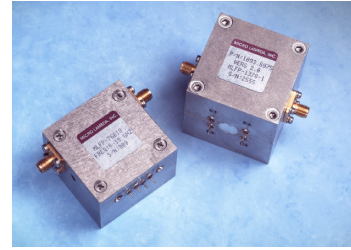


FEATURES

- 2.0-26.5 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 2-18 GHz, 2-26.5 GHz, 6-18 GHz and 8-20 GHz frequency coverage with 3 dB bandwidths from 30-500 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

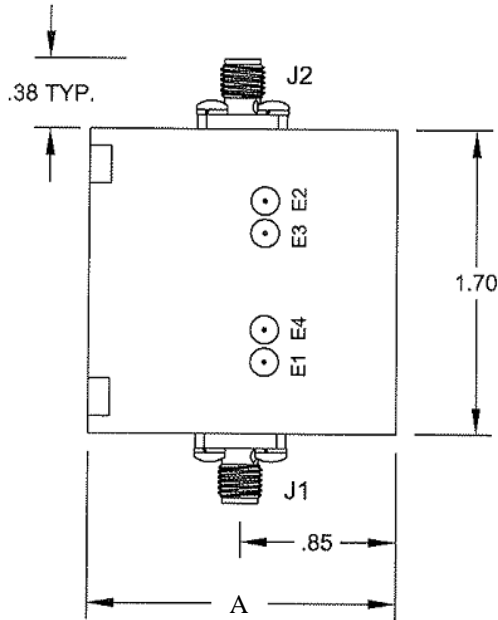
Guaranteed Specifications at -0° to $+65^{\circ}$ C Case Temperature (Note 2)

| Model No. | MLFP-72018 | MLFP-72026 | MLFP-76018 | MLFP-78020 |
|-----------------------------------------|---------------|---------------|---------------|---------------|
| Frequency Range, Min. | 2-18 GHz | 2-26.5 GHz | 6-18 GHz | 8-20 GHz |
| No. of Stages | 7 | 7 | 7 | 7 |
| 3dB Bandwidth, Min. (Note 1) | 40 MHz | 30 MHz | 500 MHz | 500 MHz |
| Insertion Loss, Max. | 7.0 dB | 9.0 dB | 7.5 dB | 6.5 dB |
| Passband Spurs & Ripple, Max. | 2.5 dB | 2.5 dB | 2.5 dB | 2.5 dB |
| Passband VSWR, Max. | 2:1 | 2:1 | 2:1 | 2:1 |
| Selectivity, Typ. | 42 dB/ Octave | 42 dB/ Octave | 42 dB/ Octave | 42 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. | +10 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. | +/- 15 MHz | +/- 50 MHz | +/- 25 MHz | +/- 30 MHz |
| Hysteresis, Typ. | 20 MHz | 20 MHz | 20 MHz | 20 MHz |
| Temperature Drift, Max. | 30 MHz | 30 MHz | 30 MHz | 30 MHz |
| Coil Resistance, Typ. | 6 Ohms | 6 Ohms | 6 Ohms | 6 Ohms |
| Coil Inductance, Typ. | 60 mH | 60 mH | 60 mH | 60 mH |
| Heater Voltage | 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 |
| Steady State @ 25 deg. C. | 100 mA | 100 mA | 100 mA | 100 mA |
| Case Style | 21-017 | 21-012-1 | 21-017 | 21-017 |

Note: 1) Modified 3 dB Bandwidths Available.

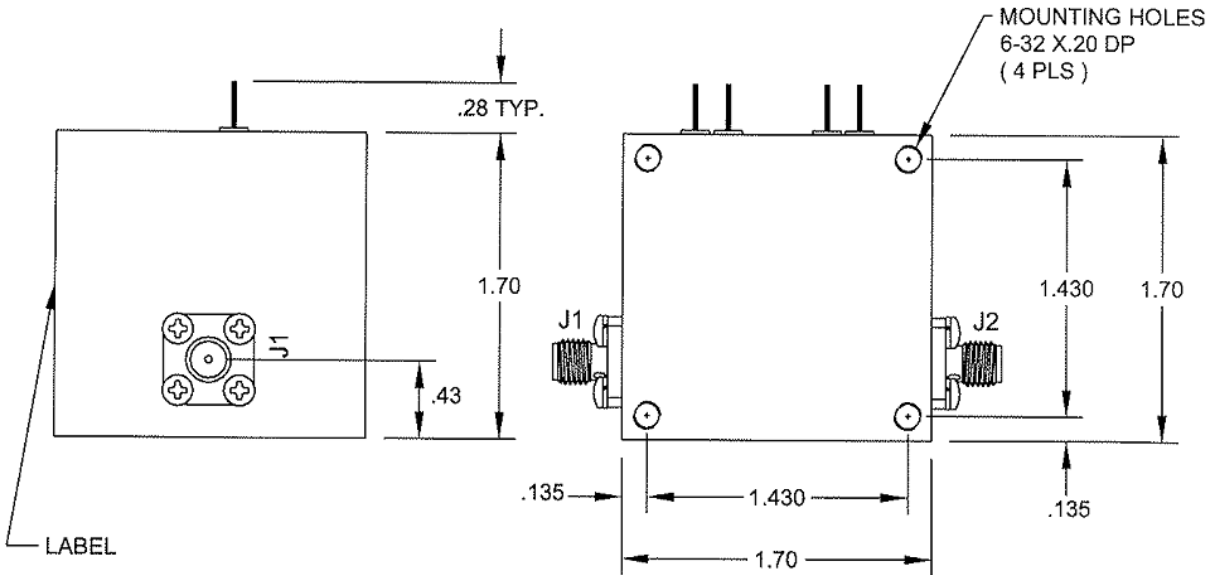
2) -54° C to $+85^{\circ}$ temperature available.

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. |