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)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>MLFP-40520</th>
<th>MLFP-42008</th>
<th>MLFP-42018</th>
<th>MLFP-42026</th>
<th>MLFP-46018</th>
<th>MLFP-48018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range, Min.</td>
<td>0.5-2 GHz</td>
<td>2-8</td>
<td>2-18 GHz</td>
<td>2-26.5 GHz</td>
<td>6-18 GHz</td>
<td>8-18 GHz</td>
</tr>
<tr>
<td>No. of Stages</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3dB Bandwidth, Min.</td>
<td>20 MHz</td>
<td>40 MHz</td>
<td>40 MHz</td>
<td>25 MHz</td>
<td>100 MHz</td>
<td>400 MHz</td>
</tr>
<tr>
<td>Insertion Loss, Max.</td>
<td>7 dB</td>
<td>6 dB</td>
<td>6 dB</td>
<td>6 dB</td>
<td>6 dB</td>
<td>6 dB</td>
</tr>
<tr>
<td>Passband Spurs &amp; Ripple, Max.</td>
<td>1.5 dB</td>
<td>1.5 dB</td>
<td>1.5 dB</td>
<td>1.5 dB</td>
<td>2.0 dB</td>
<td>2.0 dB</td>
</tr>
<tr>
<td>Passband VSWR, Max.</td>
<td>2:1</td>
<td>2:1</td>
<td>2:1</td>
<td>2:1</td>
<td>2:1</td>
<td>2:1</td>
</tr>
<tr>
<td>Off Resonance Isolation, Min.</td>
<td>80 dB</td>
<td>80 dB</td>
<td>80 dB</td>
<td>60 dB</td>
<td>70 dB</td>
<td>70 dB</td>
</tr>
<tr>
<td>Off Resonance Spurious, Min.</td>
<td>50 dB</td>
<td>50 dB</td>
<td>50 dB</td>
<td>40 dB</td>
<td>40 dB</td>
<td>40 dB</td>
</tr>
<tr>
<td>Limiting Level, Min.</td>
<td>0 dBm</td>
<td>+5 dBm</td>
<td>+5 dBm</td>
<td>+10 dBm</td>
<td>+10 dBm</td>
<td>+10 dBm</td>
</tr>
</tbody>
</table>

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. | +/- 2 MHz | +/- 10 MHz | +/- 12 MHz | +/- 20 MHz | +/- 10 MHz | +/- 10 MHz |
| Hysteresis, Typ. | 1 MHz | 10 MHz | 20 MHz | 20 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

| Steady State @ 25 deg C | 500 mA | 500 mA | 500 mA | 500 mA | 500 mA | 500 mA |

Case Style (Note 3)

| Case Style | 21-015 | 21-015 | 21-015 | 21-013 | 21-015 | 21-015 |

Notes:
1) Modified 3 dB Bandwidths available.
2) –54° to +85° temperature available.
3) 1.7 inch package available.

Micro Lambda Wireless, Inc. - 46515 Landing Parkway, Fremont California 94538 * Phone (510) 770-9221 * Fax (510) 770-9213
CASE DRAWING  21-015 / 21-013

A
B
J1

E1
E4
E2
E3

B
J2

.15 MAX

.38 TYP

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.

6-32 X .20 DP
(4 PLS)