# COLLINS TORSIONAL MECHANICAL FILTER

## 7-POLE DESIGN

### ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th></th>
<th>25 DEG. C</th>
<th>TEMP. RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CENTER FREQUENCY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FREQ. (kHz)</td>
<td>455.00</td>
<td>455.00</td>
</tr>
<tr>
<td>TOL. (kHz)</td>
<td>± 0.10</td>
<td>± 0.15</td>
</tr>
<tr>
<td><strong>BANDWIDTHS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F3H - F3L</td>
<td>WIDTH (kHz)</td>
<td>WIDTH (kHz)</td>
</tr>
<tr>
<td>0.50</td>
<td>± 0.10</td>
<td>MAX</td>
</tr>
<tr>
<td>F60H - F60L</td>
<td>2.00</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>± 0.10</td>
<td>MAX</td>
</tr>
<tr>
<td><strong>PASSBAND RIPPLE</strong></td>
<td>(dB)</td>
<td>(dB)</td>
</tr>
<tr>
<td>3</td>
<td>MAX</td>
<td>MAX</td>
</tr>
<tr>
<td><strong>INSERTION LOSS</strong></td>
<td>(dB)</td>
<td>(dB)</td>
</tr>
<tr>
<td>5</td>
<td>MAX</td>
<td>MAX</td>
</tr>
<tr>
<td><strong>STOPBAND</strong></td>
<td>(dB)</td>
<td>(dB)</td>
</tr>
<tr>
<td>440 - F60L (kHz)</td>
<td>60 MIN</td>
<td>60 MIN</td>
</tr>
<tr>
<td>F60H - 470 (kHz)</td>
<td>60 MIN</td>
<td>60 MIN</td>
</tr>
</tbody>
</table>

**NOTE:** The max. signal input voltage is 1.0 volt RMS.
ENVIRONMENTAL REQUIREMENTS:
OPERATING TEMPERATURE RANGE: 0°C to +60°C
NON-OPERATING TEMPERATURE RANGE: -30°C to +85°C
VIBRATION: MIL-STD-202, Method 201, 10 G's, 10 Hz to 55 Hz
SHOCK: MIL-STD-202, Method 213B, 50 G's, 11 ms, half-sine

MECHANICAL REQUIREMENTS:
CONSTRUCTION: Sealed, Non-Hermetic
CASE STYLE: PS
MARKING: Rockwell Collins Part Number
Date Code

TEST CIRCUIT:

NOTE: 30 pF Includes any board stray capacitance.