FEATURES

- Full waveguide band operation
- Faraday rotation type
- 18 to 110 GHz frequency range
- High Isolation

APPLICATIONS

- Test setup
- Instrumentation
- Subsystems
- Transceivers

DESCRIPTION

FFF series full band Faraday waveguide are available from 18 to 110 GHz frequency range in seven waveguide bands. The isolators feature moderate insertion loss and high isolation up to 30 dB for full waveguide bands operation. These devices are ideally suited for broadband communication systems or test instrument applications.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>K</th>
<th>Ka</th>
<th>Q</th>
<th>U</th>
<th>V</th>
<th>E</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Number</td>
<td>FFF-42-01</td>
<td>FFF-28-01</td>
<td>FFF-22-01</td>
<td>FFF-19-01</td>
<td>FFF-15-01</td>
<td>FFF-12-01</td>
<td>FFF-10-01</td>
</tr>
<tr>
<td>Freq. Range (GHz)</td>
<td>18-26.5</td>
<td>26.5-40</td>
<td>33-50</td>
<td>40-60</td>
<td>50-75</td>
<td>60-90</td>
<td>75-110</td>
</tr>
<tr>
<td>Waveguide Size</td>
<td>WR-42</td>
<td>WR-28</td>
<td>WR-22</td>
<td>WR-19</td>
<td>WR-15</td>
<td>WR-12</td>
<td>WR-10</td>
</tr>
<tr>
<td>Insertion Loss (dB max)</td>
<td>1.0</td>
<td>1.2</td>
<td>1.5</td>
<td>1.6</td>
<td>1.8</td>
<td>2.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Isolation (dB typ)</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>VSWR (max)</td>
<td>1.4:1</td>
<td>1.4:1</td>
<td>1.4:1</td>
<td>1.4:1</td>
<td>1.4:1</td>
<td>1.5:1</td>
<td>1.5:1</td>
</tr>
<tr>
<td>Power Handling (W)</td>
<td>2.0</td>
<td>2.0</td>
<td>1.5</td>
<td>1.5</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Flange Type</td>
<td>UG595/U</td>
<td>UG599/U</td>
<td>UG383/U</td>
<td>UG383/U Mod</td>
<td>UG385/U</td>
<td>UG387/U</td>
<td>UG387/U Mod</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>0 to +50°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OUTLINE DRAWING

Note: The outline is subject to change without notice. Please confirm with factory if the outline is a critical issue to your design.

High quality microwave and millimeterwave components and subsystems. Visit Ducommun at www.ducommun.com
WT-D-1
Drop-in Isolator

WT-D-2
Drop-in Circulator

WT-D-3
Coaxial Isolator

WT-D-4
Coaxial Circulator

WT-D-5
Junction Isolator

WT-D-6
Junction Circulator

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.