WR-15 Y-Junction Circulator

Y-junction circulators are a good solution in applications with moderate to low bandwidth requirements. Peak isolation and minimum port reflections naturally occur in the same part of the band yielding optimum performance.

All impedance matching is done through precision machining of the internal waveguide structures. No complicated dielectric elements are used. This approach yields a more repeatable and symmetric response between the three circulator ports. The three ports are equidistant from the ferrite disc.

Specifications

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Flange</td>
<td>WR-15 UG-385/U</td>
</tr>
<tr>
<td>Frequency (GHz)</td>
<td>58-64</td>
</tr>
<tr>
<td>Insertion Loss (dB, avg)</td>
<td>0.3</td>
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<tr>
<td>Insertion Loss (dB, max)</td>
<td>0.8</td>
</tr>
<tr>
<td>Isolation (dB, min)</td>
<td>18</td>
</tr>
<tr>
<td>Return Loss (dB, typ min)</td>
<td>19</td>
</tr>
<tr>
<td>VSWR (typ max)</td>
<td>1.25:1</td>
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<tr>
<td>Maximum Power (W)</td>
<td>3.0</td>
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</tbody>
</table>

- Widest bandwidth for Y-junction
- Internal waveguide screw access
- Anti-cocking waveguide flanges
- Compact, light-weight design
- Resists stray magnetic fields
- Comprehensive test data
- Low insertion loss
MATES WITH UG-385/U FLANGE
WR-15 WAVEGUIDE

.375 in
[9.5 mm]

1.217 in
[30.9 mm]

1.100 in
[279 mm]

.550 in
[14.0 mm]

.750 in
[19.1 mm]

Micro Harmonics
Proprietary - Micro Harmonics Corporation
Date 9/13/2023

REVISION HISTORY
ZONE REV DESCRIPTION DATE APPROVED
- - RELEASE TO CUSTOMER 10/3/23 MK

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