Renaissance Electronics Corporation developed this novel S-Band 3 port junction circulator in WR284 waveguide. This circulator is capable of handling high power levels and can be extended up to 50 kW/5kW using forced air cooling. The circulator uses a novel technique to enhance power handling performances and yet still maintain its low loss characteristics. This enables an extremely compact, lightweight circulator to be realized for a given power handling, state-of-the-art capability.

**Characteristics**

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>2.7-2.9 GHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power</td>
<td>30 kW</td>
</tr>
<tr>
<td>Average Power</td>
<td>3 kW</td>
</tr>
<tr>
<td>VSWR</td>
<td>1.15:1 Max</td>
</tr>
<tr>
<td>Loss</td>
<td>0.25 dB Max</td>
</tr>
<tr>
<td>Isolation</td>
<td>20 dB Min</td>
</tr>
</tbody>
</table>

**Markets**

- **Military**
- **Ground base and Ship borne Radar**
- **Space**
- **Communication and Telemetry**
- **Commercial**
- **Air Traffic Control**

**Features**

- Aluminum Alloy
- Low VSWR
- High Isolation
- Ferrite Resonators

**Benefits**

- Provides compact and lightweight design
- Better match to the transmitter
- Minimizes interactions
- Handles both peak and average power levels

**“Uses a novel technique to enhance power handling performances”**