Renaissance Electronics Corporation has designed and manufactured an innovative industry first coplanar surface mount circulator above 4 GHz. This newly invented and patented model series of surface mountable circulators is designated by our modeling number 3SMH Series.

Our 1st model release in this series is directed to the avionics frequency band of 4.2 to 4.4 GHz, or also known as the Radio Altimeter and Radar Altimeter Band, model number 3SMH6NA.

The SMH series supports 3.5 GHz to 7 GHz applications with a MAX bandwidth of 25% and power up to 30 watts CW. In addition to the reduced labor associated with SMT automated assembly, these packages free up valuable real-estate under the device particularly where multilayer PCB’s are required.

This unique patented true coplanar surface mount design will allow equipment manufacturers to incorporate surface mount technology into their new design efforts for improved system performance while ensuring the best cost value in component selection.

**Features**

- Compact Size
- Mechanically Robust
- True Coplanar SMT
- Low Insertion Loss
- High Isolation
- Temperature Stable From -40 to + 85°C

**Benefits**

- 0.630 ” x 0.630 ” x 0.190 ”
- Steel Housing, Re-Flow Solder Technology
- Pick and Place Low Cost Manufacturing Compatible
- Optimum System Performance
- Improves XMT/RCV Isolation
- Improves Systems Thermal Stability

**The New Thinking in Wireless Technology**
### Electrical Characteristics:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>4.2 – 4.4 GHz</td>
</tr>
<tr>
<td>Isolation (min)</td>
<td>19 dB</td>
</tr>
<tr>
<td>Insertion Loss (max)</td>
<td>0.5 dB</td>
</tr>
<tr>
<td>VSWR (max)</td>
<td>1.25 : 1</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>-40°C TO +85 °C</td>
</tr>
</tbody>
</table>

**Insertion Loss**

Note: Includes Test Fixture Loss