Variable Phase Shifters

FEATURES:

- Rugged construction
- Full band operation
- 180° phase shifting
- Low cost

APPLICATIONS:

- Test equipment
- Subsystems
- Prototypes

DESCRIPTION:

Cernexwave CPS Series variable phase shifters are offered for the frequency range of 18 to 110 GHz in seven waveguide bands. The phase shifters utilize a low loss dielectric material, which offers minimum insertion loss. The standard phase shifters are equipped with a micrometer dial, which allows for fine, accurate and repeatable phase settings. The variable phase shifters are typically used in the test setups and prototype assemblies where a certain amount of phase shift is required.

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Waveguide Band</th>
<th>Kc</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>Frequency Range (GHz)</td>
<td>15 to 22</td>
<td>18 to 26.5</td>
<td>26.5 to 40</td>
<td>33 to 50</td>
<td>40 to 60</td>
<td>50 to 75</td>
<td>60 to 90</td>
<td>75 to 110</td>
</tr>
<tr>
<td>Waveguide Size</td>
<td>WR-51</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>Variable Phase Shifting Range</td>
<td>0 to 180 degrees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VSWR (Typical)</td>
<td>1.3:1</td>
<td>1.15:1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insertion Loss (dB, Typical)</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Power Rating (Maximum)</td>
<td>--</td>
<td>0.6</td>
<td>0.6</td>
<td>0.5</td>
<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Contact factory for other waveguide bands and specifications.

HOW TO ORDER:

Specify Model Number  
CPS – WG LE HF IL – XX  
To be determined by the factory

Waveguide Size
Low End Frequency
High End Frequency
Insertion Loss

Example: To order a full band WR-15 level setting phase shifter with 1.0 dB maximum attenuation level, specify CPS – 15FF10.

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