Direct-Reading Phase Shifters

FEATURES

- High Accuracy
- Direct Reading Dial
- Frequency Independent
- Direct Drive With No Gears
- Continuously Adjustable Phase
- Low VSWR & Low Insertion Loss

APPLICATIONS

- Test Equipment
- Subsystems
- Phased Arrays
- Interferometers

DESCRIPTION

Cernexwave’s CDS Direct Reading Phase Shifters provide highly accurate measurement of phase shift over each full waveguide band from 26.5 to 110.0 GHz. They feature low VSWR, low insertion loss, and low insertion loss variation due to the rotation of the phasing section.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Waveguide Band</th>
<th>Ka</th>
<th>Q</th>
<th>U</th>
<th>V</th>
<th>E</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waveguide Size</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>Frequency Range (GHz)</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>Accuracy (°)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Insertion Loss (dB)</td>
<td>1.0</td>
<td>1.2</td>
<td>1.3</td>
<td>1.5</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>VSWR (max)</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.35</td>
</tr>
<tr>
<td>Average Power (W)</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>0.8</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Weight (Oz)</td>
<td>30</td>
<td>29</td>
<td>28</td>
<td>27</td>
<td>26</td>
<td>24</td>
</tr>
</tbody>
</table>

Phase Shift Range: 0° to 360° Direct Reading
Read-Out: 0° to 360° in 5° divisions, with 0.5° vernier
Loss Variation: 1.0 dB (max)

HOW TO ORDER

Specify Model Number

CDS-WG LF HF IL-XX

WG = Waveguide Size
LF = Low End Frequency
HF = High End Frequency
IL = Insertion Loss
XX = For Internal Use (may change at time of order)

Example: To order WR-15 direct reading phase shifter, specify CDS-15507501-XX