Circular Polarizers

FEATURES:

- VSWR < 1.2
- Higher Frequency Units will be quoted on request
- Axial Ratio < 1.0 dB over the indicated bandwidth
- Converts linear input signals to circular output
- Specify sense of circular polarization (RHCP or LHCP)
- Available from 18.0 to 110 GHz with 3% or greater bandwidth

Applications:

- Satellite Links
- Radio Astronomy
- Communication Systems

DESCRIPTION:

Cernexwave’s CCP series circular polarizer converts input linear signals to circularly polarized output signals. The circular polarization sense (RHCP or LHCP) and center frequency should be specified at the time of order. This polarizer will yield a maximum VSWR of 1.2 and an axial ratio of 1.0 dB maximum over the indicated bandwidth.

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Waveguide Band</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>Waveguide Size</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>Frequency Range (GHz)</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>
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<tr>
<td>in</td>
<td>2.3</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
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<tr>
<td>mm</td>
<td>58.4</td>
<td>38.1</td>
<td>38.1</td>
<td>38.1</td>
<td>28.0</td>
<td>28.0</td>
<td>25.4</td>
</tr>
</tbody>
</table>

HOW TO ORDER:

Specify Model Number: CCP – WG LF HF-- XX

WG: Waveguide Size
LF: Low End Frequency
HF: High End Frequency
XX: To be specified by the factory

Example: To order a circular polarizer with waveguide size of WR-15 and a frequency of 50-75 GHz, specify CCP-155075-XX.

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