EWPS2S, HELIAX® Super Premium Elliptical Waveguide, 5.925–6.425 GHz, unjacketed

Product Classification

Brand
HELIAX®

Product Type
Elliptical waveguide

Construction Materials

Jacket Material
Unjacketed

Conductor Material
Corrugated copper

Dimensions

Cable Volume
1045.0 L/km

Cable Weight
0.88 kg/m

Diameter Over Jacket (E Plane)
57.20 mm | 2.25 in

Diameter Over Jacket (H Plane)
33.30 mm | 1.31 in

Electrical Specifications

Operating Frequency Band
5.925 – 6.425 GHz

eTE11 Mode Cutoff
3.650 GHz

Group Delay at Frequency
126 ns/100 ft @ 6.200 GHz | 413 ns/100 m @ 6.200 GHz

Environmental Specifications

Installation Temperature
-40 °C to +60 °C (-40 °F to +140 °F)

Operating Temperature
-55 °C to +85 °C (-67 °F to +185 °F)

Storage Temperature
-70 °C to +85 °C (-94 °F to +185 °F)

Mechanical Specifications

Maximum Twist
1.00 °/ft

Minimum Bend Radius, Multiple Bends (E Plane)
305.00 mm | 12.01 in

Minimum Bend Radius, Multiple Bends (H Plane)
810.00 mm | 31.89 in

Minimum Bend Radius, Single Bend (E Plane)
200.00 mm | 7.87 in

Minimum Bend Radius, Single Bend (H Plane)
560.00 mm | 22.05 in

Note

Performance Note
Values typical, unless otherwise stated

Standard Conditions
Attenuation, Ambient Temperature 24 °C | 75 °F
Average Power, Ambient Temperature 40 °C | 104 °F
Average Power, Temperature Rise 42 °C | 76 °F

Return Loss/VSWR

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>VSWR</th>
<th>Return Loss (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.925–6.425 GHz</td>
<td>1.05</td>
<td>32.30</td>
</tr>
</tbody>
</table>

* VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)
* VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies
* Custom length performance: Call 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative

Attenuation

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>Attenuation (dB/100 ft)</th>
<th>Attenuation (dB/100 m)</th>
<th>Average Power (kW)</th>
<th>Group Velocity %</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.9</td>
<td>1.209</td>
<td>3.965</td>
<td>5.917</td>
<td>78.8</td>
</tr>
<tr>
<td>6.2</td>
<td>1.179</td>
<td>3.87</td>
<td>6.064</td>
<td>80.7</td>
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</tbody>
</table>

Regulatory Compliance/Certifications

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RoHS 2011/65/EU</td>
<td>Compliant</td>
</tr>
<tr>
<td>ISO 9001:2015</td>
<td>Designed, manufactured and/or distributed under this quality management system</td>
</tr>
<tr>
<td>China RoHS SJ/T 11364-2014</td>
<td>Below Maximum Concentration Value (MCV)</td>
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