EWP52-59, HELIAX® Premium Elliptical Waveguide, 5.925–6.425 GHz, black non-halogenated, fire retardant polyolefin jacket

Product Classification
Brand: HELIAX®
Product Type: Elliptical waveguide

Construction Materials
Jacket Material: Non-halogenated, fire retardant polyolefin
Conductor Material: Corrugated copper
Jacket Color: Black

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: -25 °C to +60 °C (-13 °F to +140 °F)
Operating Temperature: -30 °C to +80 °C (-22 °F to +176 °F)
Storage Temperature: -30 °C to +80 °C (-22 °F to +176 °F)

Mechanical Specifications
Fire Retardancy Test Method: UL 1666/CATVR/CMR
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
Toxicity Index Test Method: IEC 60754-2
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>1.06</td>
<td>30.70</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>
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<tr>
<td>6.1</td>
<td>1.186</td>
<td>3.89</td>
<td>6.032</td>
<td>80.3</td>
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<tr>
<td>6.3</td>
<td>1.166</td>
<td>3.825</td>
<td>6.134</td>
<td>81.6</td>
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</tbody>
</table>

Regulatory Compliance/Certifications

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL/ETL Certification</td>
<td>CATVR/CMR</td>
</tr>
<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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