EWP63S, HELIAX® Super Premium Elliptical Waveguide, 6.425–7.125 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       855.0 L/km
Cable Weight       0.76 kg/m
Diameter Over Jacket (E Plane) 51.10 mm | 2.01 in
Diameter Over Jacket (H Plane) 29.50 mm | 1.16 in

Electrical Specifications
Operating Frequency Band 6.425 – 7.125 GHz
eTE11 Mode Cutoff 4.001 GHz
Group Delay at Frequency 126 ns/100 ft @ 6.775 GHz | 413 ns/100 m @ 6.775 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) 260.00 mm | 10.24 in
Minimum Bend Radius, Multiple Bends (H Plane) 740.00 mm | 29.13 in
Minimum Bend Radius, Single Bend (E Plane) 180.00 mm | 7.09 in
Minimum Bend Radius, Single Bend (H Plane) 510.00 mm | 20.08 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>6.425–7.125 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>6.4</td>
<td>1.396</td>
<td>4.58</td>
<td>4.739</td>
<td>78.2</td>
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<tr>
<td>6.6</td>
<td>1.37</td>
<td>4.496</td>
<td>4.828</td>
<td>79.7</td>
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<td>6.8</td>
<td>1.348</td>
<td>4.423</td>
<td>4.908</td>
<td>81</td>
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<td>7</td>
<td>1.329</td>
<td>4.36</td>
<td>4.979</td>
<td>82.2</td>
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</tbody>
</table>

**Regulatory Compliance/Certifications**

**Agency**
- UL/ETL Certification
- RoHS 2011/65/EU
- ISO 9001:2015
- China RoHS SJ/T 11364-2014

**Classification**
- CATVR/CMR
- Compliant
- Designed, manufactured and/or distributed under this quality management system
- Below Maximum Concentration Value (MCV)

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