EW63, HELIAX® Standard Elliptical Waveguide, 5.925–7.125 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: 5.925 – 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

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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>5.925–7.125 GHz</td>
<td>1.15</td>
<td>23.10</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>
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</thead>
<tbody>
<tr>
<td>5.9</td>
<td>1.487</td>
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<td>4.575</td>
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<td>4.632</td>
<td>4.687</td>
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<td>4.537</td>
<td>4.784</td>
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<td>4.332</td>
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</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)