EW127A, HELIAX® Standard Elliptical Waveguide, 11.7–13.25 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 251.0 L/km
Cable Weight 0.43 kg/m
Diameter Over Jacket (E Plane) 28.20 mm | 1.11 in
Diameter Over Jacket (H Plane) 17.10 mm | 0.67 in

Electrical Specifications
Operating Frequency Band 11.7 – 13.25 GHz
eTE11 Mode Cutoff 7.670 GHz
Group Delay at Frequency 128 ns/100 ft @ 12.700 GHz | 419 ns/100 m @ 12.700 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 2.00 °/ft
Minimum Bend Radius, Multiple Bends (E Plane) 150.00 mm | 5.91 in
Minimum Bend Radius, Multiple Bends (H Plane) 380.00 mm | 14.96 in
Minimum Bend Radius, Single Bend (E Plane) 130.00 mm | 5.12 in
Minimum Bend Radius, Single Bend (H Plane) 280.00 mm | 11.02 in
Toxicity Index Test Method IEC 60754-2
Note

Performance Note

Values typical, unless otherwise stated

Standard Conditions

Attenuation, Ambient Temperature

<table>
<thead>
<tr>
<th>Temperature</th>
<th>°C</th>
<th>°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>75</td>
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</table>

Average Power, Ambient Temperature

<table>
<thead>
<tr>
<th>Temperature</th>
<th>°C</th>
<th>°F</th>
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<tbody>
<tr>
<td>40</td>
<td>104</td>
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Average Power, Temperature Rise

<table>
<thead>
<tr>
<th>Temperature</th>
<th>°C</th>
<th>°F</th>
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<tbody>
<tr>
<td>42</td>
<td>76</td>
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</table>

Return Loss/VSWR

Frequency Band: 11.7–13.25 GHz

<table>
<thead>
<tr>
<th>VSWR</th>
<th>Return Loss (dB)</th>
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</thead>
<tbody>
<tr>
<td>1.15</td>
<td>23.10</td>
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</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>11.7</td>
<td>3.742</td>
<td>12.276</td>
<td>1.196</td>
<td>75.5</td>
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<tr>
<td>12</td>
<td>3.684</td>
<td>12.086</td>
<td>1.214</td>
<td>76.7</td>
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<tr>
<td>12.2</td>
<td>3.633</td>
<td>11.918</td>
<td>1.232</td>
<td>77.8</td>
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<tr>
<td>12.4</td>
<td>3.587</td>
<td>11.769</td>
<td>1.247</td>
<td>78.8</td>
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<tr>
<td>12.7</td>
<td>3.546</td>
<td>11.634</td>
<td>1.262</td>
<td>79.7</td>
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<td>13</td>
<td>3.509</td>
<td>11.514</td>
<td>1.275</td>
<td>80.6</td>
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<td>13.2</td>
<td>3.476</td>
<td>11.405</td>
<td>1.287</td>
<td>81.4</td>
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Regulatory Compliance/Certifications

Agency

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<thead>
<tr>
<th>UL/ETL Certification</th>
<th>CATVR/CMR</th>
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<tbody>
<tr>
<td>RoHS 2011/65/EU</td>
<td>Compliant</td>
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<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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ISO

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<tr>
<th>EN</th>
<th>Rohs</th>
<th>9001-2015</th>
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China RoHS

| SJ/T 11364-2014 | Below Maximum Concentration Value (MCV) |

December 28, 2019