



EW64, HELIAX® Standard Elliptical Waveguide, 6.425–7.75 GHz, black PE jacket

## Product Classification

|                      |                      |
|----------------------|----------------------|
| <b>Product Type</b>  | Elliptical waveguide |
| <b>Product Brand</b> | HELIAX®              |

## General Specifications

|                         |   |
|-------------------------|---|
| <b>Jacket Color</b>     | Black                                   |
| <b>Performance Note</b> | Values typical, unless otherwise stated |

## Dimensions

|                                       |                                       |
|---------------------------------------|---------------------------------------|
| <b>Diameter Over Jacket (E Plane)</b> | 48.5 mm   1.909 in                    |
| <b>Diameter Over Jacket (H Plane)</b> | 28.4 mm   1.118 in                    |
| <b>Cable Volume</b>                   | 725 L/km   7.804 ft <sup>3</sup> /kft |

## Electrical Specifications

|                                 |  |
|---------------------------------|--|
| <b>eTE11 Mode Cutoff</b>        | 4.32 GHz   |
| <b>Group Delay at Frequency</b> | 125 ns/100 ft @ 7.400 GHz   411 ns/100 m @ 7.400 GHz |
| <b>Operating Frequency Band</b> | 6.425 – 7.75 GHz                                     |

## VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 6.425–7.75 GHz | 1.15 | 23.13            |
| 7.125–7.75 GHz | 1.15 | 23.13            |

## Attenuation

| Frequency (GHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) | Average Power (kW) | Group Velocity % |
|-----------------|------------------------|-------------------------|--------------------|------------------|
| 6.425           | 5.276                  | 1.608                   | 3.917              | 74               |

|             |       |       |       |      |
|-------------|-------|-------|-------|------|
| <b>6.63</b> | 5.139 | 1.566 | 4.022 | 75.9 |
| <b>6.83</b> | 5.028 | 1.533 | 4.111 | 77.5 |
| <b>7.03</b> | 4.934 | 1.504 | 4.189 | 78.9 |
| <b>7.23</b> | 4.853 | 1.479 | 4.259 | 80.2 |
| <b>7.43</b> | 4.784 | 1.458 | 4.32  | 81.4 |
| <b>7.63</b> | 4.724 | 1.44  | 4.375 | 82.4 |

## Material Specifications

|                           |                   |
|---------------------------|-------------------|
| <b>Conductor Material</b> | Corrugated copper |
| <b>Jacket Material</b>    | PE                |

## Mechanical Specifications

|  |                    |
|--|--------------------|
| <b>Minimum Bend Radius, Multiple Bends (E Plane)</b> | 260 mm   10.236 in |
| <b>Minimum Bend Radius, Multiple Bends (H Plane)</b> | 685 mm   26.969 in |
| <b>Minimum Bend Radius, Single Bend (E Plane)</b>    | 260 mm   10.236 in |
| <b>Minimum Bend Radius, Single Bend (H Plane)</b>    | 685 mm   26.969 in |
| <b>Maximum Twist</b>                                 | 3.281 °/m   1 °/ft |

## Environmental Specifications

|   |                                      |
|---|--------------------------------------|
| <b>Installation temperature</b>           | -40 °C to +60 °C (-40 °F to +140 °F) |
| <b>Operating Temperature</b>              | -55 °C to +85 °C (-67 °F to +185 °F) |
| <b>Storage Temperature</b>                | -70 °C to +85 °C (-94 °F to +185 °F) |
| <b>Attenuation, Ambient Temperature</b>   | 75 °F   23.889 °C                    |
| <b>Average Power, Ambient Temperature</b> | 104 °F   40 °C                       |
| <b>Average Power, Temperature Rise</b>    | 42 °C   107.6 °F                     |

## Packaging and Weights

|                     |                         |
|---------------------|-------------------------|
| <b>Cable weight</b> | 0.73 kg/m   0.491 lb/ft |
|---------------------|-------------------------|

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| CHINA-ROHS    | Below maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system   |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant  |

