

EW64

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



Product Classification

| | |
|----------------------|----------------------|
| Product Type | Elliptical waveguide |
| Product Brand | HELIAX® |

General Specifications

| | |
|-------------------------|---|
| Jacket Color | Black |
| Performance Note | Values typical, unless otherwise stated |

Dimensions

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

Electrical Specifications

| | |
|---------------------------------|--|
| eTE11 Mode Cutoff | 4.32 GHz |
| Group Delay at Frequency | 125 ns/100 ft @ 7.400 GHz 411 ns/100 m @ 7.400 GHz |
| Operating Frequency Band | 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 |
| 6.63 | 5.139 | 1.566 | 4.022 | 75.9 |

EW64

| | | | | |
|-------------|-------|-------|-------|------|
| 6.83 | 5.028 | 1.533 | 4.111 | 77.5 |
| 7.03 | 4.934 | 1.504 | 4.189 | 78.9 |
| 7.23 | 4.853 | 1.479 | 4.259 | 80.2 |
| 7.43 | 4.784 | 1.458 | 4.32 | 81.4 |
| 7.63 | 4.724 | 1.44 | 4.375 | 82.4 |

Material Specifications

| | |
|---------------------------|-------------------|
| Conductor Material | Corrugated copper |
| Jacket Material | PE |

Mechanical Specifications

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

Environmental Specifications

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

Packaging and Weights

| | |
|---------------------|-------------------------|
| Cable weight | 0.73 kg/m 0.491 lb/ft |
|---------------------|-------------------------|

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| 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 www.commscope.com/ProductCompliance |
| ROHS | Compliant |

