

EWP52, HELIAX® Premium Elliptical Waveguide, 5.6–6.425 GHz, black PE jacket

OBSOLETE

This product was discontinued on: January 2, 2024

Product Classification

Product Type Premium elliptical waveguide

Product Brand HELIAX®
Product Series Premium

General Specifications

Jacket Color Black

Performance Note Values typical, unless otherwise stated

Dimensions

Diameter Over Jacket (E Plane)57.2 mm | 2.252 inDiameter Over Jacket (H Plane)33.3 mm | 1.311 in

Cable Volume 1045 L/km | 11.248 ft³/kft

Electrical Specifications

eTE11 Mode Cutoff 3.65 GHz

Group Delay at Frequency 126 ns/100 ft @ 6.200 GHz | 413 ns/100 m @ 6.200 GHz

Operating Frequency Band 5.6 – 6.425 GHz

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

5.6-6.425 GHz 1.06 30.72

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Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
5.6	4.126	1.258	5.687	75.8
5.8	4.021	1.226	5.835	77.7
6.0	3.935	1.199	5.963	79.4
6.2	3.863	1.177	6.074	80.8
6.4	3.802	1.159	6.171	82.1

Material Specifications

Conductor Material Corrugated copper

Jacket Material PE

Mechanical Specifications

Minimum Bend Radius, Multiple Bends (E Plane)305 mm | 12.008 inMinimum Bend Radius, Multiple Bends (H Plane)810 mm | 31.89 inMinimum Bend Radius, Single Bend (E Plane)200 mm | 7.874 inMinimum Bend Radius, Single Bend (H Plane)560 mm | 22.047 inMaximum Twist3.281 °/m | 1 °/ft

Environmental Specifications

Installation temperature $-40 \, ^{\circ}\text{C}$ to $+60 \, ^{\circ}\text{C}$ ($-40 \, ^{\circ}\text{F}$ to $+140 \, ^{\circ}\text{F}$)Operating Temperature $-55 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ ($-67 \, ^{\circ}\text{F}$ to $+185 \, ^{\circ}\text{F}$)Storage Temperature $-70 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ ($-94 \, ^{\circ}\text{F}$ to $+185 \, ^{\circ}\text{F}$)

Attenuation, Ambient Temperature $75 \,^{\circ}\text{F}$ | $23.889 \,^{\circ}\text{C}$ Average Power, Ambient Temperature $104 \,^{\circ}\text{F}$ | $40 \,^{\circ}\text{C}$ Average Power, Temperature Rise $42 \,^{\circ}\text{C}$ | $107.6 \,^{\circ}\text{F}$

Packaging and Weights

Cable weight 0.88 kg/m | 0.591 lb/ft

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

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