EWP52S





Product Classification

Product Type Super premium elliptical waveguide

Product Brand HELIAX®

Product Series Super 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 5.925 – 6.425 GHz

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

5.925–6.425 GHz 1.05 32.3

Attenuation

Frequency (GHz) Attenuation (dB/100 m) Attenuation (dB/100 ft) Average Power (kW) Group Velocity %

5.925 3.965 1.209 5.917 78.8

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6.13	3.887	1.185	6.037	80.3
6.33	3.822	1.165	6.138	81.7

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

