EWP63S



EWP63, HELIAX® Super Premium Elliptical Waveguide, 6.425–7.125 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)
 51.1 mm | 2.012 in

 Diameter Over Jacket (H Plane)
 29.5 mm | 1.161 in

 Cable Volume
 855 L/km | 9.203 ft³/kft

Electrical Specifications

eTE11 Mode Cutoff 4.001 GHz

Group Delay at Frequency 126 ns/100 ft @ 6.775 GHz | 413 ns/100 m @ 6.775 GHz

Operating Frequency Band 6.425 – 7.125 GHz

VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 6.425–7.125 GHz
 1.05
 32.3

Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
6.425	4.58	1.396	4.739	78.2
6.63	4.492	1.369	4.832	79.7
6.83	4.419	1.347	4.912	81

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7.03 4.357 1.328 4.982 82.2

Material Specifications

Conductor Material Corrugated copper

Jacket Material PE

Mechanical Specifications

Minimum Bend Radius, Multiple Bends (E Plane)260 mm10.236 inMinimum Bend Radius, Multiple Bends (H Plane)740 mm29.134 inMinimum Bend Radius, Single Bend (E Plane)180 mm7.087 inMinimum Bend Radius, Single Bend (H Plane)510 mm20.079 inMaximum Twist3.281 %m1 %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 $+185 \,^{\circ}\text{F}$)

Average Power, Ambient Temperature $104 \, ^{\circ}\text{F} \mid 40 \, ^{\circ}\text{C}$ Average Power, Temperature Rise $42 \, ^{\circ}\text{C} \mid 107.6 \, ^{\circ}\text{F}$

Packaging and Weights

Cable weight 0.76 kg/m | 0.511 lb/ft

Regulatory Compliance/Certifications

Agency Classification

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

