EW52

EW52, HELIAX® Standard Elliptical Waveguide, 5.6–6.425 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)	57.2 mm | 2.252 in
Diameter 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	1.15	23.13

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

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| 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 in
Minimum Bend Radius, Multiple Bends (H Plane)	810 mm | 31.89 in
Minimum Bend Radius, Single Bend (E Plane)	200 mm | 7.874 in
Minimum Bend Radius, Single Bend (H Plane)	560 mm | 22.047 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	0.88 kg/m | 0.591 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

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