



EW127A, HELIAX® Standard Elliptical Waveguide, 11.7–13.25 GHz, black non-halogenated, fire retardant polyolefin 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)	28.2 mm   1.11 in
Diameter Over Jacket (H Plane)	17.1 mm   0.673 in
Cable Volume	251 L/km   2.702 ft³/kft

Electrical Specifications

eTE11 Mode Cutoff	7.67 GHz
Group Delay at Frequency	128 ns/100 ft @ 12.700 GHz   419 ns/100 m @ 12.700 GHz
Operating Frequency Band	11.7 – 13.25 GHz

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
11.7–13.25 GHz	1.15	23.13

Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
11.7	12.276	3.742	1.196	75.5
11.95	12.086	3.684	1.214	76.7
12.2	11.918	3.633	1.232	77.8

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12.45	11.769	3.587	1.247	78.8
12.7	11.634	3.546	1.262	79.7
12.95	11.514	3.509	1.275	80.6
13.2	11.405	3.476	1.287	81.4

## Material Specifications

<b>Conductor Material</b>	Corrugated copper
<b>Jacket Material</b>	Non-halogenated, fire retardant polyolefin

## Mechanical Specifications

<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	150 mm   5.906 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	380 mm   14.961 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	130 mm   5.118 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	280 mm   11.024 in
<b>Maximum Twist</b>	6.562 °/m   2 °/ft

## Environmental Specifications

<b>Installation temperature</b>	-25 °C to +60 °C (-13 °F to +140 °F)
<b>Operating Temperature</b>	-30 °C to +80 °C (-22 °F to +176 °F)
<b>Storage Temperature</b>	-30 °C to +80 °C (-22 °F to +176 °F)
<b>Average Power, Ambient Temperature</b>	104 °F   40 °C
<b>Average Power, Temperature Rise</b>	42 °C   107.6 °F
<b>Fire Retardancy Test Method</b>	UL 1666/CATVR/CMR
<b>Toxicity Index Test Method</b>	IEC 60754-2

## Packaging and Weights

<b>Cable weight</b>	0.43 kg/m   0.289 lb/ft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UL/ETL Certification	CATVR/CMR

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