

# EWP127A-117

EWP127A, HELIAX® Premium Elliptical Waveguide, 11.7–12.2 GHz, black PE jacket



**OBSOLETE**

**Replaced By:**

EWP127A      EWP127A, HELIAX® Premium Elliptical Waveguide, 11.7–13.25 GHz, black PE jacket

## Product Classification

<b>Product Type</b>	Elliptical waveguide
<b>Product Brand</b>	HELIAX®

## General Specifications

<b>Jacket Color</b>	Black
<b>Performance Note</b>	Values typical, unless otherwise stated

## Dimensions

<b>Diameter Over Jacket (E Plane)</b>	28.2 mm   1.11 in
<b>Diameter Over Jacket (H Plane)</b>	17.1 mm   0.673 in
<b>Cable Volume</b>	251 L/km   2.702 ft³/kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	7.67 GHz
<b>Group Delay at Frequency</b>	128 ns/100 ft @ 12.700 GHz   419 ns/100 m @ 12.700 GHz
<b>Operating Frequency Band</b>	11.7 – 12.2 GHz

## VSWR/Return Loss

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
11.7–12.2 GHz	1.08	28.3

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## 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

## Material Specifications

Conductor Material	Corrugated copper
Jacket Material	PE

## Mechanical Specifications

Minimum Bend Radius, Multiple Bends (E Plane)	150 mm   5.906 in
Minimum Bend Radius, Multiple Bends (H Plane)	380 mm   14.961 in
Minimum Bend Radius, Single Bend (E Plane)	130 mm   5.118 in
Minimum Bend Radius, Single Bend (H Plane)	280 mm   11.024 in
Maximum Twist	6.562 °/m   2 °/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)
Average Power, Ambient Temperature	104 °F   40 °C
Average Power, Temperature Rise	42 °C   107.6 °F

## Packaging and Weights

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

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

