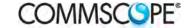
# Product Specifications





#### EW127A

EW127A, HELIAX® Standard Elliptical Waveguide, 11.7-13.25 GHz, black PE jacket

#### **Construction Materials**

Jacket Material	PE
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Conductor Material Corrugated copper

Jacket Color Black

#### **Dimensions**

Cable Volume	251.0 L/km   2.7 ft³/kft
Cable Weight	0.43 kg/m   0.29 lb/ft
Diameter Over Jacket (E Plane)	28.20 mm   1.11 in
Diameter Over Jacket (H Plane)	17.10 mm   0.67 in

#### **Electrical Specifications**

Operating Frequency Band	11.7 – 13.25 GHz
eTE11 Mode Cutoff	7.670 GHz

Group Delay 128 ns/100 ft @ 12.700 GHz 419 ns/100 m @ 12.700 GHz

#### **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)

# **General Specifications**

Brand HELIAX®

# **Mechanical Specifications**

Maximum Twist	6.00 °/m	2.	00 °/ft
Minimum Bend Radius, Multiple Bends (E Plane)	150.00 mm		6.00 in
Minimum Bend Radius, Multiple Bends (H Plane)	380.00 mm		15.00 in
Minimum Bend Radius, Single Bend (E Plane)	130.00 mm		5.00 in
Minimum Bend Radius, Single Bend (H Plane)	280.00 mm	Ι	11.00 in

#### Note

Performance Note Values typical, unless otherwise stated

# **Standard Conditions**

Attenuation, Ambient Temperature	24 °C	75 °F
Average Power, Ambient Temperature	40 °C	104 °F
Average Power, Temperature Rise	42 °C	76 °F

# Product Specifications



EW127A

#### **Return Loss/VSWR**

Frequency Band	VSWR	Return Loss (dB)
11.7-13.25 GHz	1.15	23.10

<sup>\*</sup> VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)

#### **Attenuation**

Frequency (GHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)	<b>Group Velocity %</b>
11.7	3.742	12.276	1.196	75.5
12	3.684	12.086	1.214	76.7
12.2	3.633	11.918	1.232	77.8
12.4	3.587	11.769	1.247	78.8
12.7	3.546	11.634	1.262	79.7
13	3.509	11.514	1.275	80.6
13.2	3.476	11.405	1.287	81.4

# **Regulatory Compliance/Certifications**

#### **Agency**

RoHS 2011/65/EU China RoHS SJ/T 11364-2006

ISO 9001:2008

# Classification

Compliant

Below Maximum Concentration Value (MCV)

Designed, manufactured and/or distributed under this quality management system





<sup>\*</sup> VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies

<sup>\*</sup> Custom length performance: Call 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative