Product Specifications









EWP127A-122

EWP127A, HELIAX® Premium Elliptical Waveguide, 12.2-12.7 GHz, black PE jacket

Construction Materials

Jacket Material	PE

Conductor Material Corrugated copper

Jacket Color Black

Dimensions

Cable Volume	251.0 L/km 2.7 ft ³ /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	12.2 – 12.7 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		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	

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Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
12.2-12.7 GHz	1.08	28.30

- * VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)
- * VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies
- * Custom length performance: Call +1-800-255-1479 (N. America), 1-779-435-6500 (Int'l.), or your local Andrew representative

Attenuation

Frequency (GHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)	Group Velocity %
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

Regulatory Compliance/Certifications

AgencyRoHS 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



