Product Specifications









35409-19

EW63, HELIAX® Standard Elliptical Waveguide, 5.925-7.125 GHz, black non-halogenated, fire retardant polyolefin jacket

Construction Materials

| Jacket Material | Non-halogenated, fire retardant polyolefin |
|--------------------|--|
| Conductor Material | Corrugated copper |
| Jacket Color | Black |

Dimensions

| Cable Volume | 855.0 L/km 9.2 ft ³ /kft |
|--------------------------------|---------------------------------------|
| Cable Weight | 0.76 kg/m 0.51 lb/ft |
| Diameter Over Jacket (E Plane) | 51.10 mm 2.01 in |
| Diameter Over Jacket (H Plane) | 29.50 mm 1.16 in |

Electrical Specifications

| Operating Frequency Band | 5.925 – 7.125 GHz |
|--------------------------|---|
| eTE11 Mode Cutoff | 4.001 GHz |
| Group Delay | 126 ns/100 ft @ 6.775 GHz 413 ns/100 m @ 6.775 GHz |

Environmental Specifications

| Installation Temperature | -25 °C to +60 °C (-13 °F to +140 °F) |
|--------------------------|--------------------------------------|
| Operating Temperature | -30 °C to +80 °C (-22 °F to +176 °F) |
| Storage Temperature | -30 °C to +80 °C (-22 °F to +176 °F) |

General Specifications

| Brand | HELIAX® |
|-------|----------|
| Diana | TILLIANO |

Mechanical Specifications

| Fire Retardancy Test Method | UL 1666/CATVR/CMR |
|---|----------------------|
| Maximum Twist | 3.00 °/m 1.00 °/ft |
| Minimum Bend Radius, Multiple Bends (E Plane) | 260.00 mm 10.00 in |
| Minimum Bend Radius, Multiple Bends (H Plane) | 740.00 mm 29.00 in |
| Minimum Bend Radius, Single Bend (E Plane) | 180.00 mm 7.00 in |
| Minimum Bend Radius, Single Bend (H Plane) | 510.00 mm 20.00 in |
| Toxicity Index Test Method | IEC 60754-2 |

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 |

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Average Power, Temperature Rise

42 °C | 76 °F

Return Loss/VSWR

| Frequency Band | VSWR | Return Loss (dB) |
|-----------------|------|------------------|
| 5.925-7.125 GHz | 1.15 | 23.10 |

^{*} 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) | Group Velocity % |
|-----------------|-------------------------|------------------------|--------------------|------------------|
| 5.9 | 1.487 | 4.878 | 4.45 | 73.8 |
| 6.1 | 1.446 | 4.745 | 4.575 | 75.7 |
| 6.3 | 1.412 | 4.632 | 4.687 | 77.4 |
| 6.5 | 1.383 | 4.537 | 4.784 | 79 |
| 6.7 | 1.359 | 4.458 | 4.869 | 80.3 |
| 6.9 | 1.338 | 4.39 | 4.944 | 81.6 |
| 7.1 | 1.32 | 4.332 | 5.011 | 82.7 |

Regulatory Compliance/Certifications

Agency

UL/ETL Certification RoHS 2011/65/EU

China RoHS SJ/T 11364-2006

ISO 9001:2008

Classification CATVR/CMR Compliant

Below Maximum Concentration Value (MCV)

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





^{*} 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