



Air dielectric coaxial cable, corrugated copper tube for outer conductor and smooth copper tube for inner conductor, air dielectric with PE support, 7/8 in, FRNC jacket

## **General Specifications**

Flexibility Standard
Jacket Color Black

Performance Note Attenuation guaranteed within the tolerance ±10% Structure Note Dimension guaranteed within the tolerance ±5%

Nominal Size 7/8 in

## **Material Specifications**

Inner Conductor Smooth Copper Tube

Dielectric Air Dielectric with PE Support
Outer Conductor Corrugated Copper Tube

Jacket FRNC
Diameter of Inner Conductor 9.30 mm
Diameter of Dielectric 20.80 mm
Diameter of Outer Conductor 25.20 mm
Diameter of Jacket 29.00 mm

# **Electrical Specifications**

Impedance 50 ohms±1 ohm

Maximum Available Frequence3.0 GHzCut-off Frequency6.0 GHzVelocity Ratio93%Peak Power73 kWInsulation Resistance $3000 \text{ M}\Omega \cdot \text{km}$ 

DC Breakdown Voltage 2700 V
Nominal Capacitance 71 pF/m
Nominal Inductance 0.19 µH/m



| Attenuations    |                        |                         |                    |
|-----------------|------------------------|-------------------------|--------------------|
| Frequency (MHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) | Average Power (kW) |
| 0.5             | 0.08                   | 0.02                    | 73.0               |
| 1               | 0.12                   | 0.04                    | 73.0               |
| 1.6             | 0.15                   | 0.05                    | 68.0               |
| 3               | 0.20                   | 0.06                    | 50.0               |
| 6               | 0.29                   | 0.09                    | 35.0               |
| 10              | 0.37                   | 0.11                    | 27.0               |
| 20              | 0.52                   | 0.16                    | 19.2               |
| 30              | 0.64                   | 0.2                     | 12.6               |
| 100             | 1.19                   | 0.36                    | 6.80               |
| 200             | 1.69                   | 0.52                    | 4.80               |
| 500             | 2.72                   | 0.83                    | 2.99               |
| 800             | 3.50                   | 1.07                    | 2.34               |
| 1000            | 3.92                   | 1.19                    | 2.08               |
| 2000            | 5.85                   | 1.78                    | 1.43               |



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

| Frequency Band              | VSWR | Return Loss (dB) | Tolerance |
|-----------------------------|------|------------------|-----------|
| 550-1600 KHz                | 1.10 | 26.4             | 5%        |
| 87-108 MHz                  | 1.10 | 26.4             | 5%        |
| 1CH-12CH Specified Channel  | 1.15 | 23.1             | 5%        |
| 13CH-24CH Specified Channel | 1.15 | 23.1             | 5%        |
| 25CH-68CH Specified Channel | 1.15 | 23.1             | 5%        |

# **Mechanical Specifications**

Bending Radius (Single)≥90 mmBending Radius (Repeated)≥300 mmNumber of Bending (Typical)≤15Tensile Strength2800N

## **Environmental Specifications**

Installation Temperature  $-20 \,^{\circ}\text{C}$  to  $+55 \,^{\circ}\text{C}$  Operating Temperature  $-20 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  Storage Temperature  $-25 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$ 

# **Regulatory Compliances**

ISO 9001:2015 Compliant
ROHS Compliant
China RoHS Compliant
UK RoHS Compliant
REACH Compliant
EU/CE Compliant

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