FC50R-158-PE-01 HLHTY-50-42





Radiating cable, slotted and corrugated copper tube for outer conductor and helical copper tube for inner conductor, foam PE dielectric, 1-5/8 in, black PE jacket

General Specifications

Flexibility	Standard
Jacket Color	Black
Performance Note	Attenuation guaranteed within the tolerance $\pm 10\%$
Structure Note	Dimension guaranteed within the tolerance $\pm 5\%$
Nominal Size	1-5/8 in

Material Specifications

Inner Conductor	Helical Copper Tube
Dielectric	Foam PE
Outer Conductor	Slotted and Corrugated Copper Tube
Jacket	Black PE
Diameter of Inner Conductor	17.30 mm
Diameter of Dielectric	41.80 mm
Diameter of Outer Conductor	46.50 mm
Diameter of Jacket	49.80 mm

Electrical Specifications

Impedance	50 ohms±1 ohm
Maximum Available Frequence	50-2500 MHz
Velocity Ratio	88%
Peak Power	315 kW
Insulation Resistance	100,000 MΩ·km
DC Breakdown Voltage	11,000 V
Nominal Capacitance	70 pF/m
Nominal Inductance	0.19 µH/m

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Attenuations

Frequency	Attenuation	Attenuation	Coupling Loss, 2m
(MHz)	(dB/100 m)	(dB/100 ft)	(dB, 50%)
150	0.7	0.21	73/84
450	1.9	0.58	73/83
900	2.5	0.76	76/86
1800	4.1	1.25	73/79
2400	5.2	1.58	72/80

Return Loss / VSWR

Frequency Band	VSWR	Return Loss (dB)	Tolerance
50-2500MHz	1.30	17.7	5%

Mechanical Specifications

Bending Radius (Single)	≥500 mm
Bending Radius (Repeated)	≥750 mm
Number of Bending (Typical)	≤15
Tensile Strength	3500N

Environmental Specifications

Installation Temperature	-20 °C to +55 °C
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +85 °C

Regulatory Compliances

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

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