



Radiating cable, slotted and corrugated copper tape 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 ±10% Structure Note Dimension guaranteed within the tolerance ±5%

Nominal Size 1-5/8 in

Material Specifications

Inner Conductor Helical Copper Tube

Dielectric Foam PE

Outer Conductor Slotted and Corrugated Copper Tape

Jacket Black PE
Diameter of Inner Conductor 17.30 mm
Diameter of Dielectric 43.50 mm
Diameter of Outer Conductor 43.60 mm
Diameter of Jacket 49.50 mm

Electrical Specifications

Impedance 50 ohms±1 ohm

Maximum Available Frequence 2650 MHz

Stop Band 650-750 / 1000-1050 / 1330-1430 / 2025-2100 MHz

Velocity Ratio 89% Peak Power 310 kW

Insulation Resistance 100,000 MΩ·km

DC Breakdown Voltage 8000 V
Nominal Capacitance 70 pF/m
Nominal Inductance 0.19 µH/m

FC50R-158-PE-01 HLRHTHY-50-42



Attenuations

Frequency	Attenuation	Attenuation	Coupling Loss, 2m
(MHz)	(dB/100 m)	(dB/100 ft)	(dB, 50% / 95%)
800	2.41	0.73	68/72
900	2.71	0.83	66/72
1800	4.50	1.37	56/59
1900	4.70	1.43	59/61
2200	5.63	1.72	62/71
2400	5.70	1.74	65/75

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Return Loss / VSWR

Frequency Band VSWR Return Loss (dB) Tolerance 100-2650MHz 1.30 17.7 5%

Mechanical Specifications

Bending Radius (Single) \geq 500 mmBending Radius (Repeated) \geq 750 mmNumber of Bending (Typical) \leq 15Tensile Strength2450N

Environmental Specifications

Installation Temperature $-20 \, ^{\circ}\text{C}$ to $+55 \, ^{\circ}\text{C}$ Operating Temperature $-40 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ Storage Temperature $-55 \, ^{\circ}\text{C}$ 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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