# FC50R-114-PE-01 HLRCTHY-50-32





Radiating cable, slotted and corrugated copper tape for outer conductor and smooth copper tube for inner conductor, foam PE dielectric, 1-1/4 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	1-1/4 in

### **Material Specifications**

Inner Conductor	Smooth Copper Tube
Dielectric	Foam PE
Outer Conductor	Slotted and Corrugated Copper Tape
Jacket	Black PE
Diameter of Inner Conductor	13.10 mm
Diameter of Dielectric	33.60 mm
Diameter of Outer Conductor	34.00 mm
Diameter of Jacket	38.10 mm

### **Electrical Specifications**

Impedance	50 ohms±1 ohm
Maximum Available Frequence	2650 MHz
Stop Band	650-750 / 1330-1430 / 2025-2100 MHz
Velocity Ratio	89%
Peak Power	91 kW
Insulation Resistance	100,000 MΩ·km
DC Breakdown Voltage	8000 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% / 95%)
150	1.14	0.35	83/90
350	1.81	0.55	81/91
450	1.89	0.58	84/93
800	2.87	0.87	69/75
900	2.96	0.9	68/74
1800	6.06	1.85	58/64
1900	6.08	1.85	60/66
2200	6.39	1.95	63/71

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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)	≥500 mm
Bending Radius (Repeated)	≥750 mm
Number of Bending (Typical)	≤15
Tensile Strength	2450N

#### **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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