



Radiating cable, slotted and corrugated copper tape for outer conductor and smooth copper tube for inner conductor, foam PE dielectric, 7/8 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 7/8 in

### **Material Specifications**

Inner Conductor Smooth Copper Tube

Dielectric Foam PE

Outer Conductor Slotted and Corrugated Copper Tape

JacketBlack PEDiameter of Inner Conductor9.30 mmDiameter of Dielectric23.50 mmDiameter of Outer Conductor23.80 mmDiameter of Jacket28.50 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



# **Attenuations**

Frequency	Attenuation	Attenuation	Coupling Loss, 2m
(MHz)	(dB/100 m)	(dB/100 ft)	(dB, 50% / 95%)
150	1.68	0.51	73/84
350	2.68	0.82	73/83
450	3.07	0.94	76/86
800	4.29	1.31	73/79
900	4.64	1.41	72/80
1800	8.79	2.68	67/75
1900	9.90	3.02	66/72
2200	11.40	3.47	68/74

#### FC50R-78-PE-01 HLRCTHY-50-22



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

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

### **Mechanical Specifications**

Bending Radius (Single) $\geq 350 \text{ mm}$ Bending Radius (Repeated) $\geq 500 \text{ mm}$ Number of Bending (Typical) $\leq 15$ Tensile Strength2300N

# **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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