

RCT5-WBC-1X-RNA



RCT5, RADIAX® Coaxial Radiating Cable, 50–2 800 MHz, foil, 7/8 in, black non-halogenated, fire retardant polyolefin jacket

Product Classification

Product Type	Radiating cable
Product Brand	RADIAX®
Product Series	RCT5

General Specifications

Cable Type	Coupled Mode Series
Jacket Color	Black

Dimensions

Diameter Over Jacket, maximum	1.09 in 27.686 mm
Inner Conductor OD	9.449 mm 0.372 in
Outer Conductor OD	24.13 mm 0.95 in
Nominal Size	7/8 in
Recommended Distance from the Wall	4 in 101.6 mm
Recommended Hanger Spacing	1 m 3.281 ft

Electrical Specifications

Attenuation Test Method	IEC 61196-4
Attenuation Tolerance	±5%
Attenuation, Ambient Temperature	68 °F 20 °C
Cable Impedance	50 ohm ±2 ohm
dc Resistance, Inner Conductor	1.435 ohms/km 0.437 ohms/kft
dc Resistance, Outer Conductor	3.4 ohms/km 1.036 ohms/kft
dc Test Voltage	6000 V
Insulation Resistance	100000 Mohms•km

RCT5-WBC-1X-RNA

Jacket Spark Test Voltage (rms)	8000 V
Operating Frequency Band	50 – 2800 MHz
Peak Power	91 kW
Polarization	Vertical
Velocity	91 %
VSWR Installed, typical, 1700–2700 MHz	1.38
VSWR Installed, typical, 50–960 MHz	1.3
VSWR on Reel, typical	1.43

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Coupling Loss 50%	Coupling Loss 95%
75.0	1.1	0.34	56	62
100.0	1.3	0.4	56	68
150.0	1.6	0.49	61	72
350.0	2.5	0.76	72	82
450.0	2.8	0.85	75	86
800.0	3.8	1.16	75	86
900.0	4.1	1.25	73	84
960.0	4.3	1.31	74	86
1700.0	6.3	1.92	69	80
1800.0	6.4	1.95	69	79
1900.0	6.6	2.01	68	78
2000.0	6.9	2.1	67	78
2100.0	7.1	2.16	67	78
2200.0	7.4	2.26	68	80
2300.0	7.7	2.35	67	78
2400.0	7.8	2.38	66	77
2500.0	8.2	2.5	66	78
2600.0	8.3	2.53	67	78
2700.0	8.9	2.71	65	76
2800.0	9.1	2.77	66	78

Material Specifications

Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin

RCT5-WBC-1X-RNA

Inner Conductor Material	Copper tube
Outer Conductor Material	Copper foil

Mechanical Specifications

Minimum Bend Radius, single Bend	10 in 254 mm
Tensile Strength	215 kg 473.993 lb
Bending Moment	15 N-m 132.761 in lb
Coupling Loss Test Method	IEC 61196-4
Coupling Loss Tolerance	±10 dB
Flat Plate Crush Strength	0.6 kg/mm 33.598 lb/in

Environmental Specifications

Installation temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Operating Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Storage Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Inner Conductor Temperature	212 °F 100 °C
Fire Retardancy Test Method	IEC 60332-1 IEC 60332-3C-24
Smoke Index Test Method	IEC 61034
Toxicity Index Test Method	IEC 60754-1 IEC 60754-2

Packaging and Weights

Cable weight	0.42 kg/m 3.038 lb/ft
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Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant

