

RCT4-WBC-1X-RNA



RCT4, RADIAX® Coaxial Radiating Cable with Bump, 50–3800 MHz, foil, 1/2 in, black non-halogenated, fire retardant polyolefin jacket

Product Classification

Product Type	Radiating cable
Product Brand	RADIAX®
Product Series	RCT4

General Specifications

Cable Type	Coupled Mode Series
Jacket Color	Black

Dimensions

Diameter Over Jacket, maximum	0.64 in 16.256 mm
Inner Conductor OD	4.826 mm 0.19 in
Outer Conductor OD	12.954 mm 0.51 in
Nominal Size	1/2 in
Recommended Distance from the Wall	2 in 50.8 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 ±3 ohm
dc Resistance, Inner Conductor	1.48 ohms/km 0.451 ohms/kft
dc Resistance, Outer Conductor	5.305 ohms/km 1.617 ohms/kft
dc Test Voltage	4000 V
Insulation Resistance	100000 Mohms•km

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Jacket Spark Test Voltage (rms)	8000 V
Operating Frequency Band	50 – 3800 MHz
Peak Power	40 kW
Polarization	Vertical
Velocity	88 %
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	1.8	0.54	59	67
100.0	2.1	0.65	52	63
150.0	2.6	0.79	61	71
350.0	3.9	1.19	72	83
450.0	4.4	1.34	74	84
700.0	6.4	1.95	73	83
800.0	6.9	2.1	73	84
900.0	7.4	2.3	73	85
960.0	7.7	2.4	73	85
1700.0	10.7	3.3	70	81
1800.0	11.2	3.4	69	80
1900.0	11.5	3.5	71	82
2000.0	11.6	3.6	69	81
2100.0	12.3	3.7	72	84
2200.0	12.5	3.8	70	82
2300.0	13.3	4.1	64	75
2400.0	13.8	4.2	66	77
2500.0	14.3	4.4	66	77
2600.0	14.7	4.5	65	75
2700.0	15.4	4.7	63	75
2800.0	16	4.9	60	70
3300.0	18.2	5.5	56	65
3400.0	18.6	5.7	56	65
3500.0	19.1	5.8	56	65

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3600.0	20.8	6.33	58	65
3700.0	21.4	6.52	60	65
3800.0	22.2	6.76	61	67

Material Specifications

Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin
Inner Conductor Material	Copper-clad aluminum wire
Outer Conductor Material	Copper foil

Mechanical Specifications

Minimum Bend Radius, single Bend	5 in 127 mm
Tensile Strength	45 kg 99.208 lb
Bending Moment	3.7 N-m 32.748 in lb
Coupling Loss Test Method	IEC 61196-4
Coupling Loss Tolerance	±10 dB
Flat Plate Crush Strength	0.7 kg/mm 39.198 lb/in
Indication of Slot Alignment	Yes—bumps face the wall

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	0.19 kg/m 1.374 lb/ft
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value

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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

