

RCT6-WBC-1X-RNA



RCT6, RADIAX® Coaxial Radiating Cable with Bump, 50–3800 MHz, tuned foil, 1-1/4 in, black non-halogenated, fire retardant polyolefin jacket

Product Classification

Product Type	Radiating cable
Product Brand	RADIAX®
Product Series	RCT6

General Specifications

Cable Type	Coupled Mode Series
Jacket Color	Black

Dimensions

Diameter Over Jacket, maximum	1.54 in 39.116 mm
Inner Conductor OD	14.208 mm 0.559 in
Outer Conductor OD	34.036 mm 1.34 in
Nominal Size	1-1/4 in
Recommended Distance from the Wall	4 in 101.6 mm
Recommended Hanger Spacing	1.3 m 4.265 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	1.74 ohms/km 0.53 ohms/kft
dc Resistance, Outer Conductor	2.953 ohms/km 0.9 ohms/kft
dc Test Voltage	8500 V
Insulation Resistance	100000 Mohms•km

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Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	50 – 3800 MHz
Optimum Operating Frequency Band	50 – 3800 MHz
Peak Power	180 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	0.8	0.24	56	68
100.0	0.9	0.27	57	68
150.0	1.1	0.33	62	76
350.0	1.7	0.52	75	86
450.0	2	0.61	76	86
800.0	2.65	0.81	75	86
900.0	2.85	0.87	75	86
1700.0	4.3	1.31	71	82
1800.0	4.45	1.36	70	81
1900.0	4.6	1.4	67	79
2000.0	4.8	1.46	67	77
2100.0	5	1.52	69	79
2200.0	5.3	1.62	69	79
2300.0	5.4	1.64	66	77
2400.0	5.6	1.71	66	76
2500.0	5.9	1.8	65	77
2600.0	6.1	1.86	66	77
2700.0	6.4	1.95	66	76
2800.0	6.5	1.98	66	78
3400.0	9	2.7	60	66
3500.0	9.3	2.8	59	65
3600.0	9.5	2.9	60	65
3700.0	9.7	2.96	60	66

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3800.0 10.1 3.1 44 49

Material Specifications

Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin
Inner Conductor Material	Corrugated copper tube
Outer Conductor Material	Copper foil

Mechanical Specifications

Minimum Bend Radius, single Bend	15 in 381 mm
Tensile Strength	168 kg 370.376 lb
Bending Moment	15.5 N-m 137.187 in lb
Coupling Loss Test Method	IEC 61196-4
Coupling Loss Tolerance	±5 dB
Flat Plate Crush Strength	1.4 kg/mm 78.396 lb/in
Indication of Slot Alignment	No cable/slot orientation needed

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	0.64 kg/m 4.629 lb/ft
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
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

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ROHS

Compliant

