

RCT5-CP-1A-RNA



RCT5, RADIAX® Coaxial Radiating Cable with Bump, 800–2000 MHz, tuned foil, 7/8 in, black non-halogenated, fire retardant polyolefin jacket

Product Classification

Brand	RADIAX®
Product Series	RCT5
Product Type	Radiating cable

Construction Materials

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

Dimensions

Nominal Size	7/8 in
Diameter Over Jacket, maximum	27.686 mm 1.090 in
Inner Conductor OD	0.3720 in 9.4500 mm
Outer Conductor OD	0.950 in 24.100 mm
Cable Weight	0.28 lb/ft 0.42 kg/m

Electrical Specifications

Operating Frequency Band	50 – 2000 MHz
Optimum Operating Frequency Band	1800 – 2000 MHz 800 – 960 MHz
Polarization	Vertical
VSWR Installed, typical, 1700–2700 MHz	1.38
VSWR Installed, typical, 50–960 MHz	1.30
VSWR on Reel, typical	1.43
Cable Impedance	50 ohm ±2 ohm
dc Resistance, Inner Conductor	0.410 ohms/kft 1.435 ohms/km
dc Resistance, Outer Conductor	1.036 ohms/kft 3.400 ohms/km
dc Test Voltage	6000 V
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	8000 V

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Peak Power	91.0 kW
Velocity	91%

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)

General Specifications

Cable Type	Radiating Mode (RCT) Series
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Mechanical Specifications

Bending Moment	14.9 N-m 11.0 ft lb
Flat Plate Crush Strength	35.0 lb/in 0.6 kg/mm
Indication of Slot Alignment	Yes; bumps face the wall
Minimum Bend Radius, Single Bend	254.00 mm 10.00 in
Recommended Distance from the Wall	101.6 mm 4.0 in
Recommended Hanger Spacing	1.0 m 3.3 ft
Tensile Strength	215 kg 475 lb
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

Standard Conditions

Attenuation Test Method	IEC 61196-4
Attenuation Tolerance	±5%
Attenuation, Ambient Temperature	20 °C 68 °F
Average Power, Ambient Temperature	40 °C 104 °F
Average Power, Inner Conductor Temperature	100 °C 212 °F
Coupling Loss Test Method	IEC 61196-4
Coupling Loss Tolerance	±5 dB

Electrical Performance

Frequency	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Coupling Loss 50%	Coupling Loss 95%
75 MHz	0.90	0.27	70	78
100 MHz	1.10	0.34	68	80
150 MHz	1.30	0.40	74	85
350 MHz	2.20	0.67	88	98
450 MHz	2.50	0.76	86	97
800 MHz	3.40	1.04	71	74
900 MHz	3.70	1.13	72	76

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1700 MHz	6.10	1.86	63	74
1800 MHz	6.40	1.94	62	75
1900 MHz	6.70	2.04	61	73
2000 MHz	7.20	2.19	59	71

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

