

RCT6-S-1A-RNA



RCT6, RADIAX® Coaxial Radiating Cable with Bump, 1700-2500 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

Polarization	Vertical
Cable Type	Radiating Mode (RCT) Series
Jacket Color	Black

Dimensions

Diameter Over Jacket, maximum	39.116 mm 1.54 in
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	101.6 mm 4 in
Recommended Hanger Spacing	1.3 m 4.265 ft

Electrical Specifications

Attenuation Test Method	IEC 61196-4
Attenuation Tolerance	±5%
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

RCT6-S-1A-RNA

Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	1700 – 2500 MHz
Optimum Operating Frequency Band	2300 – 2500 MHz
Peak Power	180 kW
Velocity	91 %
VSWR Installed, typical, 1700–2500 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%
1700.0	3.5	1.066	75	77
1800.0	3.6	1.097	72	76
1900.0	3.8	1.158	70	72
2000.0	3.9	1.188	69	73
2100.0	4.1	1.25	67	70
2200.0	4.3	1.31	67	70
2300.0	4.5	1.37	66	69
2400.0	4.8	1.463	63	66
2500.0	5.2	1.584	62	65

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	381 mm 15 in
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

RCT6-S-1A-RNA

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)
Attenuation, Ambient Temperature 68 °F | 20 °C
Average Power, Ambient Temperature 104 °F | 40 °C
Average Power, Inner Conductor Temperature 212 °F | 100 °C
Fire Retardancy Test Method IEC 60332-1-2 | 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 | 0.43 lb/ft

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

