RCT6-LT-1A-RNA

RCT6, RADIA® Coaxial Radiating Cable with Bump, 50–900 MHz, tuned foil, 1-1/4 in, black non-halogenated, fire retardant polyolefin jacket

Product Classification

Product Type: Radiating cable
Product Brand: RADIA®
Product Series: RCT6

General Specifications

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

Dimensions

Diameter Over Jacket: 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-LT-1A-RNA

**Insulation Resistance** 100000 MOhms-km

**Jacket Spark Test Voltage (rms)** 10000 V

**Operating Frequency Band** 50 – 900 MHz

**Optimum Operating Frequency Band** 70 – 500 MHz

**Peak Power** 180 kW

**Stop Bands** 295 – 335 MHz | 610 – 664 MHz

**Velocity** 91 %

**VSWR Installed, typical, 50–960 MHz** 1.3

**VSWR on Reel, typical** 1.43

### Attenuation

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Attenuation (dB/100 m)</th>
<th>Attenuation (dB/100 ft)</th>
<th>Coupling Loss 50%</th>
<th>Coupling Loss 95%</th>
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<td>65</td>
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</table>

### 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
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
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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
ROHS | Compliant
UK-ROHS | Compliant