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
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

<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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<tbody>
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<td>3.5</td>
<td>1.066</td>
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<td>1800.0</td>
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<td>1900.0</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 | 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

Classification: Designed, manufactured and/or distributed under this quality management system