RCT5-LTC-2A-RNA

RCT5, RADIAX® Coaxial Radiating Cable, 50–1000 MHz, foil, 7/8 in, black non-halogenated, fire retardant polyolefin jacket

Product Classification

Product Type: Radiating cable
Product Brand: RADIAX®
Product Series: RCT5

General Specifications

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

Dimensions

Diameter Over Jacket, maximum: 27.686 mm | 1.09 in
Inner Conductor OD: 9.449 mm | 0.372 in
Outer Conductor OD: 24.13 mm | 0.95 in
Nominal Size: 7/8 in
Recommended Distance from the Wall: 101.6 mm | 4 in
Recommended Hanger Spacing: 1 m | 3.281 ft

Electrical Specifications

Attenuation Test Method: IEC 61196-4
Attenuation Tolerance: ±5%
Cable Impedance: 50 ohm ±2 ohm
dc Resistance, Inner Conductor: 1.435 ohms/km | 0.437 ohms/kft
dc Resistance, Outer Conductor: 3.4 ohms/km | 1.036 ohms/kft
dc Test Voltage: 6000 V
**Insulation Resistance**

100000 MOhms-km

**Jacket Spark Test Voltage (rms)**

8000 V

**Operating Frequency Band**

50 – 1000 MHz

**Optimum Operating Frequency Band**

70 – 960 MHz

**Peak Power**

91 kW

**Stop Bands**

650 – 720 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>
</tr>
</thead>
<tbody>
<tr>
<td>75.0</td>
<td>1.1</td>
<td>0.34</td>
<td>56</td>
<td>62</td>
</tr>
<tr>
<td>100.0</td>
<td>1.2</td>
<td>0.37</td>
<td>55</td>
<td>67</td>
</tr>
<tr>
<td>150.0</td>
<td>1.5</td>
<td>0.46</td>
<td>62</td>
<td>72</td>
</tr>
<tr>
<td>350.0</td>
<td>2.5</td>
<td>0.76</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>450.0</td>
<td>2.7</td>
<td>0.82</td>
<td>67</td>
<td>77</td>
</tr>
<tr>
<td>800.0</td>
<td>4.2</td>
<td>1.28</td>
<td>62</td>
<td>73</td>
</tr>
<tr>
<td>900.0</td>
<td>4.5</td>
<td>1.37</td>
<td>62</td>
<td>72</td>
</tr>
<tr>
<td>960.0</td>
<td>4.8</td>
<td>1.46</td>
<td>62</td>
<td>69</td>
</tr>
</tbody>
</table>

### Material Specifications

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

### Mechanical Specifications

- **Minimum Bend Radius, single Bend**: 254 mm | 10 in
- **Tensile Strength**: 215 kg | 473.993 lb
- **Bending Moment**: 15 N-m | 132.761 in lb
- **Coupling Loss Test Method**: IEC 61196-4
- **Coupling Loss Tolerance**: ±5 dB
- **Flat Plate Crush Strength**: 0.6 kg/mm | 33.598 lb/in
Indication of Slot Alignment
Yes–bumps face the wall

Environmental Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation temperature</td>
<td>-30 °C to +60 °C (-22 °F to +140 °F)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-30 °C to +80 °C (-22 °F to +176 °F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-30 °C to +80 °C (-22 °F to +176 °F)</td>
</tr>
<tr>
<td>Attenuation, Ambient Temperature</td>
<td>68 °F</td>
</tr>
<tr>
<td>Average Power, Ambient Temperature</td>
<td>104 °F</td>
</tr>
<tr>
<td>Average Power, Inner Conductor Temp.</td>
<td>212 °F</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Weight</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable weight</td>
<td>0.42 kg/m</td>
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</tbody>
</table>

Regulatory Compliance/Certifications

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
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<tbody>
<tr>
<td>ISO 9001:2015</td>
<td>Designed, manufactured and/or distributed under this quality management system</td>
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<tr>
<td>REACH-SVHC</td>
<td>Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a></td>
</tr>
<tr>
<td>ROHS</td>
<td>Compliant</td>
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