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

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 – 1000 MHz
Optimum Operating Frequency Band: 70 – 960 MHz
Polarization: Vertical
Velocity: 91 %
VSWR Installed, typical, 50–960 MHz: 1.30
VSWR on Reel, typical: 1.43
Stop Bands: 650 – 720 MHz
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: 100,000 Mohms•km

©2019 CommScope, Inc. All rights reserved. All trademarks identified by ® or ™ are registered trademarks, respectively, of CommScope. All specifications are subject to change without notice. See www.commscope.com for the most current information. Revised: August 9, 2019
**Jacket Spark Test Voltage (rms)** 8000 V  
**Peak Power** 91.0 kW  

### 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  

### Mechanical Specifications

- **Bending Moment**: 11.0 ft lb | 15.0 N·m  
- **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**: 475 lb | 215 kg  
- **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

<table>
<thead>
<tr>
<th>Frequency</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 MHz</td>
<td>1.10</td>
<td>0.34</td>
<td>56</td>
<td>62</td>
</tr>
<tr>
<td>100 MHz</td>
<td>1.20</td>
<td>0.37</td>
<td>55</td>
<td>67</td>
</tr>
<tr>
<td>150 MHz</td>
<td>1.50</td>
<td>0.46</td>
<td>62</td>
<td>72</td>
</tr>
<tr>
<td>350 MHz</td>
<td>2.50</td>
<td>0.76</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>450 MHz</td>
<td>2.70</td>
<td>0.82</td>
<td>67</td>
<td>77</td>
</tr>
<tr>
<td>800 MHz</td>
<td>4.20</td>
<td>1.28</td>
<td>62</td>
<td>73</td>
</tr>
<tr>
<td>900 MHz</td>
<td>4.50</td>
<td>1.37</td>
<td>62</td>
<td>72</td>
</tr>
</tbody>
</table>
RCT5-LTC-2A-RNA

960 MHz  4.80  1.46  62  69

Regulatory Compliance/Certifications

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RoHS 2011/65/EU</td>
<td>Compliant</td>
</tr>
<tr>
<td>ISO 9001:2015</td>
<td>Designed, manufactured and/or distributed under this quality management system</td>
</tr>
</tbody>
</table>