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
- **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**: 100000 Mohms•km
- **Jacket Spark Test Voltage (rms)**: 8000 V

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Peak Power 91.0 kW
Velocity 91%

Environmental Specifications

- Installation Temperature: -30 °C to +60 °C (-22 ºF to +140 ºF)
- Operating Temperature: -30 °C to +80 °C (-22 ºF to +176 ºF)
- Storage Temperature: -30 °C to +80 °C (-22 ºF to +176 ºF)

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 ºC | 68 ºF
- Average Power, Ambient Temperature: 40 ºC | 104 ºF
- Average Power, Inner Conductor Temperature: 100 ºC | 212 ºF
- 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>
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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>
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<tr>
<td>ISO 9001:2015</td>
<td>Designed, manufactured and/or distributed under this quality management system</td>
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