RCT6-LTC-5A-RNA

RCT6, RADIAX® Coaxial Radiating Cable with Bump, 70–960 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 50 – 1000 MHz
Optimum Operating Frequency Band 70 – 960 MHz
Peak Power 180 kW
Stop Bands 520 – 600 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>0.8</td>
<td>0.24</td>
<td>59</td>
<td>71</td>
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<tr>
<td>100.0</td>
<td>0.9</td>
<td>0.27</td>
<td>61</td>
<td>70</td>
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<tr>
<td>150.0</td>
<td>1.1</td>
<td>0.33</td>
<td>67</td>
<td>80</td>
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<tr>
<td>350.0</td>
<td>1.7</td>
<td>0.52</td>
<td>70</td>
<td>76</td>
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<td>450.0</td>
<td>1.9</td>
<td>0.58</td>
<td>66</td>
<td>70</td>
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<tr>
<td>800.0</td>
<td>2.7</td>
<td>0.83</td>
<td>62</td>
<td>66</td>
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<td>900.0</td>
<td>3</td>
<td>0.91</td>
<td>63</td>
<td>67</td>
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</tbody>
</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

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