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

Brand: RADIAX®
Product Series: RCT6
Product Type: Radiating cable

Construction Materials

Jacket Material: Non-halogenated, fire retardant polyolefin
Dielectric Material: Foam PE
Inner Conductor Material: Corrugated copper tube
Jacket Color: Black
Outer Conductor Material: Copper foil
Tape Barrier: Mica

Dimensions

Nominal Size: 1-1/4 in
Inner Conductor OD: 0.5200 in | 14.2080 mm
Outer Conductor OD: 1.350 in | 34.290 mm
Diameter Over Jacket: 39.116 mm | 1.540 in
Cable Weight: 0.43 lb/ft | 0.64 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: 520 – 600 MHz
Cable Impedance: 50 ohm ±3 ohm
dc Resistance, Inner Conductor: 0.530 ohms/kft | 1.740 ohms/km
dc Resistance, Outer Conductor: 0.900 ohms/kft | 2.953 ohms/km
dc Test Voltage: 8500 V
Insulation Resistance: 100000 Mohms•km

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Jacket Spark Test Voltage (rms) 10000 V
Peak Power 180.0 kW
Velocity 91%

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 15.5 N-m | 11.4 ft lb
Flat Plate Crush Strength 80.0 lb/in | 1.4 kg/mm
Indication of Slot Alignment Yes; bumps face the wall
Minimum Bend Radius, Single Bend 381.00 mm | 15.00 in
Recommended Distance from the Wall 101.6 mm | 4.0 in
Recommended Hanger Spacing 1.3 m | 4.3 ft
Tensile Strength 168 kg | 370 lb

Fire Retardancy Test Method IEC 60332-1 | IEC 60332-3C-2 | NFPA 130-2010
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>
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</thead>
<tbody>
<tr>
<td>75 MHz</td>
<td>0.80</td>
<td>0.24</td>
<td>60</td>
<td>72</td>
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<tr>
<td>100 MHz</td>
<td>0.90</td>
<td>0.27</td>
<td>61</td>
<td>70</td>
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<tr>
<td>150 MHz</td>
<td>1.10</td>
<td>0.33</td>
<td>67</td>
<td>80</td>
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<tr>
<td>350 MHz</td>
<td>1.70</td>
<td>0.52</td>
<td>70</td>
<td>78</td>
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<tr>
<td>450 MHz</td>
<td>1.90</td>
<td>0.58</td>
<td>66</td>
<td>70</td>
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<tr>
<td>800 MHz</td>
<td>2.70</td>
<td>0.83</td>
<td>62</td>
<td>66</td>
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</table>
RCT6-LTC-5A-RNAM

900 MHz  3.00  0.91  63  67

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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