

RCT6-LTC-4A-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

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|---|----------------------|
| 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

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|---------------------------------------|------------------------------|
| 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 |

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| | |
|--|-------------------------------|
| 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 | 590 – 635 MHz 895 – 904 MHz |
| Velocity | 91 % |
| VSWR Installed, typical, 50–960 MHz | 1.3 |
| VSWR on Reel, typical | 1.43 |

Attenuation

| Frequency (MHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) | Coupling Loss 50% | Coupling Loss 95% |
|------------------------|-------------------------------|--------------------------------|--------------------------|--------------------------|
| 75.0 | 0.8 | 0.24 | 64 | 77 |
| 100.0 | 0.9 | 0.27 | 62 | 74 |
| 150.0 | 1 | 0.304 | 69 | 80 |
| 350.0 | 1.6 | 0.487 | 72 | 75 |
| 450.0 | 1.9 | 0.58 | 67 | 70 |
| 800.0 | 2.8 | 0.853 | 64 | 68 |
| 900.0 | 3.3 | 1 | 63 | 67 |

Material Specifications

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|---------------------------------|--|
| Dielectric Material | Foam PE |
| Jacket Material | Non-halogenated, fire retardant polyolefin |
| Inner Conductor Material | Corrugated copper tube |
| Outer Conductor Material | Copper foil |

Mechanical Specifications

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|---|--------------------------|
| 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 |

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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

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|---------------------|------------------------|
| Cable weight | 0.64 kg/m 0.43 lb/ft |
|---------------------|------------------------|

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Below maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |

