

RCT5-CP-1A-RNA



RCT5, RADIAX® Coaxial Radiating Cable with Bump, 800–2000 MHz, tuned foil, 7/8 in, black non-halogenated, fire retardant polyolefin jacket

OBSOLETE

This product was discontinued on: July 30, 2021

Product Classification

| | |
|-----------------------|-----------------|
| Product Type | Radiating cable |
| Product Brand | RADIAX® |
| Product Series | RCT5 |

General Specifications

| | |
|---------------------|-----------------------------|
| Polarization | Vertical |
| Cable Type | Radiating Mode (RCT) Series |
| Jacket Color | Black |

Dimensions

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|---|---------------------|
| Diameter Over Jacket, maximum | 27.686 mm 1.09 in |
| Inner Conductor OD | 9.449 mm 0.372 in |
| Outer Conductor OD | 24.13 mm 0.95 in |
| Nominal Size | 7/8 in |
| Recommended Distance from the Wall | 101.6 mm 4 in |
| Recommended Hanger Spacing | 1 m 3.281 ft |

Electrical Specifications

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|--------------------------------|---------------|
| Attenuation Test Method | IEC 61196-4 |
| Attenuation Tolerance | ±5% |
| Cable Impedance | 50 ohm ±2 ohm |

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|---|---------------------------------|
| dc Resistance, Inner Conductor | 1.435 ohms/km 0.437 ohms/kft |
| dc Resistance, Outer Conductor | 3.4 ohms/km 1.036 ohms/kft |
| dc Test Voltage | 6000 V |
| Insulation Resistance | 100000 MOhms-km |
| Jacket Spark Test Voltage (rms) | 8000 V |
| Operating Frequency Band | 50 – 2000 MHz |
| Optimum Operating Frequency Band | 1800 – 2000 MHz 800 – 960 MHz |
| Peak Power | 91 kW |
| Velocity | 91 % |
| VSWR Installed, typical, 1700–2700 MHz | 1.38 |
| 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 | 0.9 | 0.27 | 70 | 78 |
| 100.0 | 1.1 | 0.34 | 68 | 80 |
| 150.0 | 1.3 | 0.4 | 74 | 85 |
| 350.0 | 2.2 | 0.67 | 88 | 98 |
| 450.0 | 2.5 | 0.76 | 86 | 97 |
| 800.0 | 3.4 | 1.04 | 71 | 74 |
| 900.0 | 3.7 | 1.13 | 72 | 76 |
| 1700.0 | 6.1 | 1.86 | 63 | 74 |
| 1800.0 | 6.4 | 1.94 | 62 | 75 |
| 1900.0 | 6.7 | 2.04 | 61 | 73 |
| 2000.0 | 7.2 | 2.19 | 59 | 71 |

Material Specifications

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

Mechanical Specifications

| | |
|---|----------------|
| Minimum Bend Radius, single Bend | 254 mm 10 in |
|---|----------------|

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|-------------------------------------|--------------------------|
| Tensile Strength | 215 kg 473.993 lb |
| Bending Moment | 14.9 N-m 131.876 in lb |
| Coupling Loss Test Method | IEC 61196-4 |
| Coupling Loss Tolerance | ±5 dB |
| Flat Plate Crush Strength | 0.6 kg/mm 33.598 lb/in |
| Indication of Slot Alignment | Yes—bumps face the wall |

Environmental Specifications

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|---|--------------------------------------|
| 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 60332-1-2 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 | 0.42 kg/m 0.282 lb/ft |
|---------------------|-------------------------|

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

