

RCT6-S-1A-RVD



RCT6, RADIAX® Coaxial Radiating Cable with Bump, 1700-2500 MHz, tuned foil, 1-1/4 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 | 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 |

RCT6-S-1A-RVD

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|---|------------------------------|
| 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 | 1700 – 2500 MHz |
| Optimum Operating Frequency Band | 2300 – 2500 MHz |
| Peak Power | 180 kW |
| Velocity | 91 % |
| VSWR Installed, typical, 1700–2500 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% |
|-----------------|------------------------|-------------------------|-------------------|-------------------|
| 1700.0 | 3.5 | 1.066 | 75 | 77 |
| 1800.0 | 3.6 | 1.097 | 72 | 76 |
| 1900.0 | 3.8 | 1.158 | 70 | 72 |
| 2000.0 | 3.9 | 1.188 | 69 | 73 |
| 2100.0 | 4.1 | 1.25 | 67 | 70 |
| 2200.0 | 4.3 | 1.31 | 67 | 70 |
| 2300.0 | 4.5 | 1.37 | 66 | 69 |
| 2400.0 | 4.8 | 1.463 | 63 | 66 |
| 2500.0 | 5.2 | 1.584 | 62 | 65 |

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 |

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

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

