

Product Specification

50 Ohm Plenum, 1/2" (6 GHz)

Copper Outer Conductor - APC012J50-RD



| Description | Product Number |
|--|---------------------------|
| Plenum Rated Cable | |
| 1/2", Corrugated, Copper Outer Conductor, Jacketed CMP, Conforms to NFPA-262, UL-444, Canadian CSA 22.2/FT6 | APC012J50-RD |
| Physical Dimensions | |
| Center Diameter, in (mm) | 0.188 (4.78) |
| Diameter Over Outer Conductor, in (mm) | 0.550 (13.97) |
| Maximum Diameter Over Jacket, in (mm) | 0.63 (16.00) |
| Center Conductor | Copper-Clad Aluminum |
| Outer Conductor | Corrugated Copper |
| Jacket Color | Red |
| Electrical Characteristics | |
| Maximum Frequency, GHz | 10 |
| Peak Power Rating, KW | 40 |
| DC Resistance, Ohms/1,000 ft (1,000 m) | |
| Center | 0.46 (1.51) |
| Outer | 0.39 (1.28) |
| DC Breakdown, kV | 2 |
| Capacitance, pF/ft (m) | 22 (72.12) |
| Inductance, mH/ft (m) | 0.057 (0.187) |
| Jacket Spark, kV RMS | 8 |
| VSWR min, (dB) | 1.25 (19.0) |
| VSWR typical, 700-960 / 1700-2200 MHz (dB) | 1.13 (24.3) |
| Impedance, Ohms | 50 ± 2 |
| Velocity of Propagation | 94% |
| Mechanical Characteristics | |
| Minimum Bend Radius, in (mm) - Single | 2 (50.8) |
| Minimum Bend Radius, in (mm) - Multiple | 5 (127) |
| Cable Weight, lb/ft (kg/m) | 0.20 (0.30) |
| Bending Moment, ft lb (N m) | 3.0 (4.1) |
| Tensile Strength, lb (kg) | 275 (125) |
| Flat Plate Crush, lb/in (kg/mm) | 110 (2.0) |
| Number of Bends, minimum | 15 |
| Recommended Install Temp., °F (°C) | +5° to 194° (-15° to 90°) |
| Recommended Storage Temp., °F (°C) | +5° to 194° (-15° to 90°) |
| Recommended Operating Temp., °F (°C) | +5° to 194° (-15° to 90°) |
| Standard Conditions | |
| For Attenuation: VSWR 1.0, Ambient Temperature 20°C (68°F) | |
| For Average Power: VSWR 1.0, Ambient Temperature 40°C (104°F), Inner Conductor Temperature 100°C (212°F), No Solar Loading | |
| Regulatory Compliance/Certifications | |
| RoHS 2011/65/EU Compliant | |
| TL 9000 H-V - All Cables designed and manufactured under this quality management system | |

| Frequency, MHz | Attenuation | | Average Power kW |
|----------------|-------------|----------|------------------|
| | dB/100 ft | dB/100 m | |
| 100 | 0.65 | 2.13 | 4.82 |
| 450 | 1.43 | 4.69 | 2.21 |
| 500 | 1.52 | 4.99 | 2.10 |
| 600 | 1.64 | 5.38 | 1.91 |
| 700 | 1.75 | 5.74 | 1.76 |
| 800 | 1.87 | 6.14 | 1.68 |
| 900 | 1.98 | 6.50 | 1.55 |
| 960 | 2.04 | 6.69 | 1.49 |
| 1000 | 2.10 | 6.89 | 1.46 |
| 1500 | 2.62 | 8.60 | 1.18 |
| 1700 | 2.79 | 9.15 | 1.10 |
| 1800 | 2.88 | 9.45 | 1.07 |
| 1950 | 3.01 | 9.88 | 1.02 |
| 2000 | 3.05 | 10.01 | 1.01 |
| 2100 | 3.14 | 10.30 | 0.99 |
| 2200 | 3.23 | 10.60 | 0.96 |
| 2300 | 3.33 | 10.93 | 0.94 |
| 2400 | 3.42 | 11.22 | 0.91 |
| 2500 | 3.48 | 11.42 | 0.90 |
| 2700 | 3.65 | 11.97 | 0.86 |
| 3000 | 3.83 | 12.57 | 0.81 |
| 3300 | 4.02 | 13.19 | 0.76 |
| 3400 | 4.08 | 13.39 | 0.66 |
| 4000 | 4.45 | 14.60 | 0.69 |
| 4900 | 5.00 | 16.40 | 0.60 |
| 5000 | 5.06 | 16.60 | 0.60 |
| 5200 | 5.34 | 17.52 | 0.58 |
| 5300 | 5.48 | 17.98 | 0.57 |
| 5600 | 5.90 | 19.36 | 0.53 |
| 5825 | 6.32 | 20.73 | 0.49 |

Trilogy AirCell® Cable

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