

### Product Specification

#### 50 Ohm Plenum, 1/2"

#### Copper Outer Conductor - APC012J50-RD

Description	Product Number
<b>Plenum Rated Cable</b>	
1/2", Corrugated, Copper Outer Conductor, Jacketed CMP, Conforms to NFPA-262, UL-444, Canadian CSA 22.2/FT6	APC012J50-RD
<b>Physical Dimensions</b>	
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
<b>Electrical Characteristics</b>	
Maximum Frequency, GHz	1
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, 450-512 / 698-960 MHz (dB)	1.13 (24.3)
Impedance, Ohms	50 ± 2
Velocity of Propagation	94%
<b>Mechanical Characteristics</b>	
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°)
<b>Standard Conditions</b>	
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	
<b>Regulatory Compliance/Certifications</b>	
RoHS 2011/65/EU Compliant	
TL 9000 H-V - All Cables designed and manufactured under this quality management system	



Attenuation and Average Power			
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

**Trilogy AirCell® Cable**

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