

#### 50 Ohm Plenum Cable, 1/4" - APC014J50

Description	Product Number
<b>Plenum Rated Cable</b>	
1/4", Corrugated, Copper Outer Conductor, Jacketed CMP, Conforms to NFPA-262, UL-444, Canadian CSA 22.2/FT6	APC014J50
<b>Physical Dimensions</b>	
Center Diameter, in (mm)	0.074 (1.88)
Diameter Over Outer Conductor, in (mm)	0.250 (6.35)
Maximum Diameter Over Jacket, in (mm)	0.290 (7.366)
Center Conductor	Copper-Clad Aluminum
Outer Conductor	Corrugated Copper
Jacket Color	White
<b>Electrical Characteristics</b>	
Maximum Frequency, GHz	20
Peak Power Rating, KW	6.4
DC Resistance, Ohms/1,000 ft (1,000 m)	
Center	1.90 (6.234)
Outer	2.00 (6.562)
DC Breakdown, kV	4
Capacitance, pF/ft (m)	24.60 (80.70)
Inductance, mH/ft (m)	0.063 (0.207)
Jacket Spark, kV RMS	4000
VSWR min, (dB)	1.35 (16.54)
VSWR typical, 680-960 / 1700-2700 MHz (dB)	1.14 (24.00)
Impedance, Ohms	50 ± 2
Velocity of Propagation	82%
<b>Mechanical Characteristics</b>	
Minimum Bend Radius, in (mm) - Single	1 (25.4)
Minimum Bend Radius, in (mm) - Multiple	1 (25.4)
Cable Weight, lb/ft (kg/m)	0.07 (0.10)
Bending Moment, ft lb (N m)	0.60 (0.80)
Tensile Strength, lb (kg)	150 (68)
Flat Plate Crush, lb/in (kg/mm)	100 (1.80)
Number of Bends, minimum	15
Recommended Install Temp., °F (°C)	+5° to 194° (-15° to 90°)
Recommended Storage Temp., °F (°C)	-40° to 167° (-40° to 75°)
Recommended Operating Temp., °F (°C)	-40° to 167° (-40° to 75°)
<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	



Frequency, MHz	Attenuation		Average Power kW
	dB/100 ft	dB/100 m	
1	0.12	0.39	9.28
10	0.55	1.81	2.87
50	1.25	4.10	1.24
100	1.79	5.87	0.85
150	2.23	7.32	0.68
200	2.64	8.66	0.58
300	3.34	10.96	0.46
400	3.93	12.90	0.39
450	4.24	13.92	0.36
500	4.50	14.77	0.34
600	5.05	16.57	0.31
700	5.55	18.22	0.28
800	6.03	19.79	0.26
824	6.13	20.12	0.25
894	6.47	21.23	0.24
960	6.77	22.22	0.23
1000	6.94	22.78	0.22
1250	8.01	26.29	0.19
1500	9.00	29.54	0.17
1700	9.75	32.00	0.16
1800	10.12	33.21	0.15
2000	10.86	35.64	0.14
2100	11.37	37.32	0.14
2200	11.80	38.73	0.14
2300	11.92	39.12	0.13
2500	12.54	41.16	0.12
2700	13.22	43.39	0.12
3000	14.07	46.18	0.11
3400	15.38	50.48	0.10
4000	17.90	58.75	0.09
5000	19.68	64.59	0.08
6000	22.20	72.86	0.07