

Cable Specifications

50 Ohm Plenum, 1/2" Copper Outer Conductor

Description	Product Code
Plenum Cables	
1/2" Corrugated Cable, Jacketed UL-910, CATVP	APC012J50
Physical Deminsions	
Center Conductor	Copper Clad Aluminum
Outer Conductor	Corrugated Copper
Dia. Over Outer Conductor, in (mm)	0.540 (13.72)
Dia. Over Jacket, in (mm)	0.615 (15.62)
Electrical Characteristics	
Impedance, Ohms	50
Maximum Frequency, GHz	10
Velocity of Propagation	96%
Peak Power Rating, kW	40
DC Res., Ohms/1000 ft (1000 m)	
Center	0.46 (1.51)
Outer	0.39 (1.28)
DC Breakdown, kV	4
Jacket Spark, kV RMS	8
Capacitance, pF/ft (m)	22 (72.12)
Inductance, mH/ft (m)	0.057 (0.187)
Mechanical Characteristics	
Minimum Bending Radius, in (mm)	5 (127)
Number of Bends, minimum (typical)	15 (20)
Bending Moment, lb-ft (N.m)	3.0 (4.1)
Cable Weight, lb/ft (kg/m)	0.19 (0.28)
Tensile Strength, lb. (kg)	275 (125)
Flat Plate Crush Strength lb./in (kg/mm)	110 (2.0)
Temperature °F (°C)	
Recommended Install	+5 to 194 (-15 to 90)
Recommended Storage	+5 to 194 (-15 to 90)
Operating	+5 to 194 (-15 to 90)



Frequency MHz	Attenuation and Average Power		Avg Pwr kW
	Attenuation* dB/100ft	dB/100m	
30	0.34	1.12	8.24
50	0.44	1.44	6.34
88	0.59	1.93	4.75
100	0.63	2.05	4.46
108	0.65	2.14	4.29
150	0.77	2.53	3.63
174	0.83	2.73	3.36
200	0.89	2.93	3.13
300	1.10	3.61	2.54
400	1.28	4.19	2.19
450	1.36	4.46	2.06
500	1.43	4.71	1.95
512	1.45	4.77	1.92
600	1.58	5.18	1.77
700	1.71	5.61	1.63
800	1.84	6.02	1.52
824	1.86	6.12	1.50
894	1.95	6.39	1.44
900	1.95	6.41	1.43
960	2.02	6.63	1.38
1000	2.07	6.78	1.35
1250	2.33	7.63	1.20
1500	2.56	8.41	1.09
1700	2.74	9.00	1.02
1800	2.83	9.28	0.99
1950	2.95	9.69	0.95
2000	2.99	9.82	0.93
2300	3.23	10.59	0.86
2400	3.22	10.57	0.82
3000	3.73	12.25	0.75
3300	4.09	13.41	0.69
3400	4.12	13.51	0.68
4000	4.77	15.64	0.63
4900	6.04	19.81	0.57
5000	5.54	18.17	0.56
5200	5.37	17.61	0.55
5300	5.32	17.45	0.54
5600	5.43	17.81	0.53
6000	5.90	19.35	0.51

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