

50 Ohm Ultra Flexible Cable, 1/4" - ACC014J50

Description	Product Number
Ultra Flexible Cable	
1/4", Copper Corrugated, Low-Smoke, Non-Halogenated, Fire Retardant, UV Stabilized Black Polyethylene Jacket	ACC014J50
Physical Dimensions	
Center Diameter, in (mm)	0.0728 (1.849)
Diameter Over Outer Conductor, in (mm)	0.250 (6.35)
Maximum Diameter Over Jacket, in (mm)	0.295 (7.62)
Center Conductor	Copper-Clad Aluminum
Outer Conductor	Corrugated Copper
Jacket Color	Black
Electrical Characteristics	
Maximum Frequency, GHz	18
Peak Power Rating, KW	6.4
DC Resistance, Ohms/1,000 ft (1,000 m)	
Center	3.00 (9.843)
Outer	2.20 (7.216)
DC Breakdown, kV	4
Capacitance, pF/ft (m)	24.20 (79.40)
Inductance, mH/ft (m)	0.200 (0.061)
Jacket Spark, kV RMS	4000
VSWR min, (dB)	1.43 (15.00)
VSWR typical, 680-960 / 1700-2200 MHz (dB)	1.20 (20.80)
Impedance, Ohms	50 ± 2
Velocity of Propagation	82%
Mechanical Characteristics	
Minimum Bend Radius, in (mm) - Single	1 (25.4)
Minimum Bend Radius, in (mm) - Multiple	1 (25.4)
Cable Weight, lb/ft (kg/m)	0.05 (0.07)
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 140° (-40° to 60°)
Recommended Operating Temp., °F (°C)	-40° to 140° (-40° to 60°)
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	



Attenuation and Average Power			
Frequency, MHz	Attenuation		Average Power kW
	dB/100 ft	dB/100 m	
100	1.85	6.07	1.23
200	2.63	8.63	0.86
450	3.96	13.00	0.57
800	5.33	17.49	0.42
900	5.65	18.54	0.39
1000	5.98	19.63	0.37
1500	7.43	24.39	0.30
1800	8.19	26.88	0.27
2000	8.63	28.32	0.26
2200	9.12	29.93	0.25
2300	9.36	30.72	0.24
2500	9.74	31.97	0.23
3000	10.76	35.31	0.21
4000	12.62	41.42	0.17
5000	14.28	46.87	0.15
6000	15.77	51.76	0.14