

Semi-Rigid Coaxial Cables

P/N UT-141A-AL | 50 Ω Aluminum Outer Conductor

INTRODUCTION



Our 50 Ω aluminum semi-rigid cables are ideal for hand forming or where weight savings is a premium.

DIMENSIONS

Outer Conductor Diameter	in	0.141 ± 0.001
	mm	3.581 ± 0.025
Center Conductor Diameter	in	0.0362
	mm	0.9195
Length (Maximum)	Feet	20
	Meter	6.10

MATERIALS

Outer Conductor	Aluminum
Outer Conductor Plating	None
Dielectric	PTFE
Center Conductor	SPCW
RoHS Compliant	✓

MECHANICAL CHARACTERISTICS*

Outer Conductor Integrity Temp.	°C	225
Operating Temperature (Max)	°C	225
Inside Bend Radius (Minimum)	in	0.125
	mm	3.175
Weight	lbs / 100ft	1.93
	kg / 100m	2.90

* Applicable at room temperature. Contact factory for performance over temperature range.

ELECTRICAL CHARACTERISTICS*

Characteristic Impedance	ohm	50
Capacitance	pF / ft	29.0
	pF / m	95.2
Corona Extinction Voltage	VRMS @ 60 Hz	3200
Voltage Withstanding	VRMS @ 60 Hz	9600
Higher Order Mode Frequency	GHz	34.0
Attenuation (Db / 100 Ft Typical)	@ 0.5 GHz	7.9
	@ 1.0 GHz	11.5
	@ 5.0 GHz	28.7
	@ 10.0 GHz	43.3
	@ 18.0 GHz	63
	@ 26.5 GHz	80.3
	@ 40.0 GHz	N/A
	@ 50.0 GHz	N/A
	@ 65.0 GHz	N/A
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	557.7
	@ 1.0 GHz	388.5
	@ 5.0 GHz	163.4
	@ 10.0 GHz	110.6
	@ 18.0 GHz	78.5
	@ 26.5 GHz	62.2
	@ 40.0 GHz	N/A
	@ 50.0 GHz	N/A
	@ 65.0 GHz	N/A
@ 90.0 GHz	N/A	