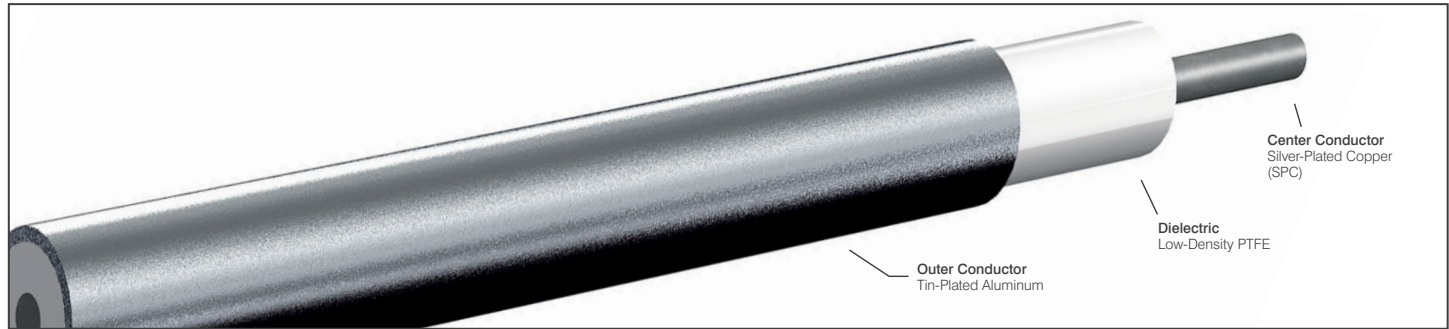


## Low-Loss Semi-Rigid Coaxial Cables

P/N UT-141C-AL-TP-LL | 50 Ω Tin-Plated Aluminum Outer Conductor

### INTRODUCTION



Low-loss semi-rigid cables provide lower attenuation, better phase stability with temperature, and a higher operating temperature compared to traditional solid PTFE semi-rigid cables.

Our low-loss semi-rigid cables are available with a copper, tin-plated copper, aluminum, or tin-plated aluminum outer conductor.

### DIMENSIONS

Outer Conductor Diameter	in	0.141 + 0.003/-0.002
	mm	3.581 + 0.076/-0.051
Center Conductor Diameter	in	0.0403
	mm	1.0236
Length (Maximum)	Feet	20
	Meter	6.10

### MATERIALS

Outer Conductor	Aluminum
Outer Conductor Plating	Tin
Dielectric	LD PTFE
Center Conductor	SPC
RoHS Compliant	✓

### MECHANICAL CHARACTERISTICS\*

Outer Conductor Integrity Temp.	°C	225
Operating Temperature (Max)	°C	225
Inside Bend Radius (Minimum)	in	0.500
	mm	12.700
Weight	lbs / 100ft	1.83
	kg / 100m	2.75

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

### ELECTRICAL CHARACTERISTICS\*

Characteristic Impedance	ohm	50
Capacitance	pF / ft	26.5
	pF / m	86.8
Corona Extinction Voltage	VRMS @ 60 Hz	2800
Voltage Withstanding	VRMS @ 60 Hz	8400
Higher Order Mode Frequency	GHz	37.0
Attenuation (Db / 100 Ft Typical)	@ 0.5 GHz	7.6
	@ 1.0 GHz	10.8
	@ 5.0 GHz	24.8
	@ 10.0 GHz	35.7
	@ 18.0 GHz	49.1
	@ 26.5 GHz	60.7
	@ 40.0 GHz	N/A
	@ 50.0 GHz	N/A
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	642.5
	@ 1.0 GHz	452.1
	@ 5.0 GHz	198.1
	@ 10.0 GHz	138
	@ 18.0 GHz	101.1
	@ 26.5 GHz	82.2
	@ 40.0 GHz	N/A
	@ 50.0 GHz	N/A
	@ 65.0 GHz	N/A
	@ 90.0 GHz	N/A