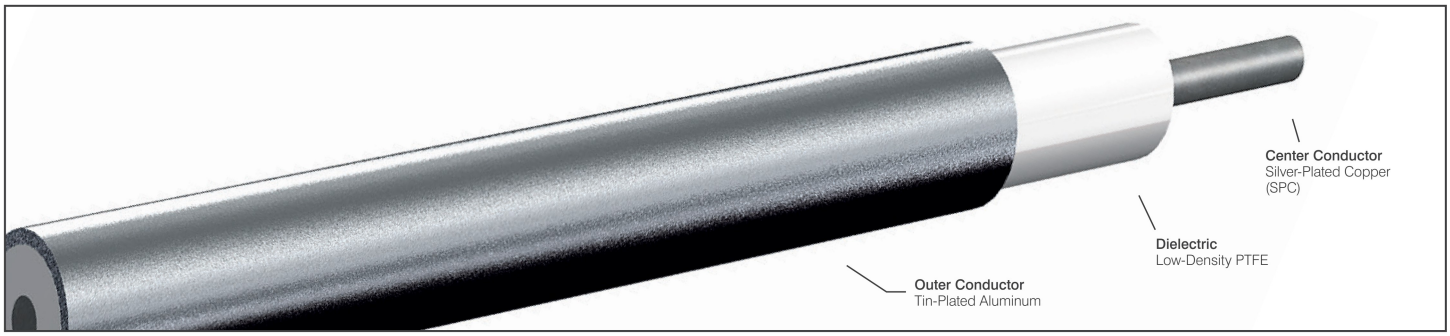
Low-Loss Semi-Rigid Coaxial Cables

P/N UT-085C-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	0.0865 + 0.002/-0.0010
	mm	2.1971 + 0.0508/-0.0254
Center Conductor Diameter	in	0.0226
	mm	0.5740
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	0.250
	mm	6.350
Weight	lbs / 100ft	0.69
	kg / 100m	1.04

** 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	1600
Voltage Withstanding	VRMS @ 60 Hz	4800
Higher Order Mode Frequency	GHz	65.0
Attenuation (Db / 100 Ft Typical)	@ 0.5 GHz	13.4
	@ 1.0 GHz	19
	@ 5.0 GHz	43.1
	@ 10.0 GHz	61.7
	@ 18.0 GHz	83.9
	@ 26.5 GHz	102.9
	@ 40.0 GHz	128.3
	@ 50.0 GHz	144.7
	@ 65.0 GHz	166.9
	@ 90.0 GHz	N/A
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	262.7
	@ 1.0 GHz	185.2
	@ 5.0 GHz	81.9
	@ 10.0 GHz	57.4
	@ 18.0 GHz	42.4
	@ 26.5 GHz	34.6
	@ 40.0 GHz	27.9
	@ 50.0 GHz	24.8
	@ 65.0 GHz	21.5
	@ 90.0 GHz	N/A