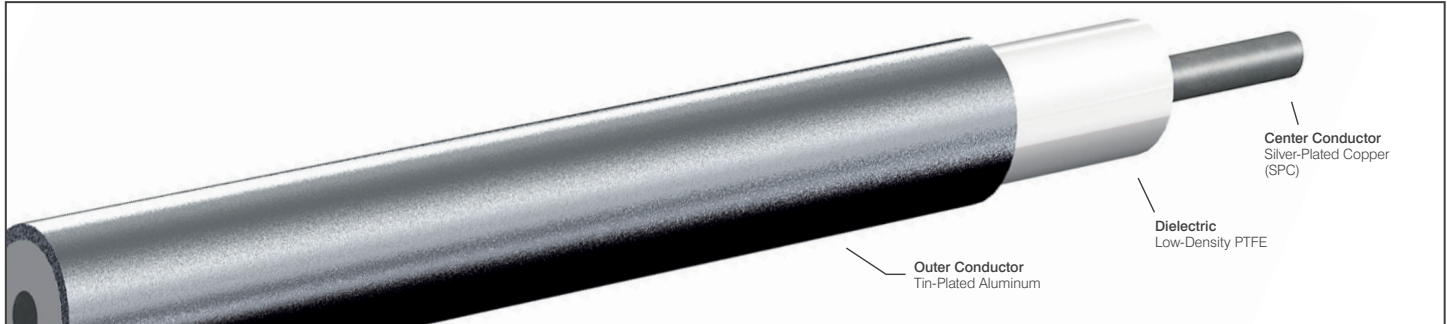


Low-Loss Semi-Rigid Coaxial Cables

P/N UT-047C-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

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Outer Conductor Diameter	in	0.047 + 0.002/-0.001
	mm	1.194 + 0.051/-0.025
Center Conductor Diameter	in	0.0126
	mm	0.3200
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	0.125
	mm	3.175
Weight	lbs / 100ft	0.20
	kg / 100m	0.30

* 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	900
Voltage Withstanding	VRMS @ 60 Hz	2700
Higher Order Mode Frequency	GHz	116.0
Attenuation (Db / 100 Ft Typical)	@ 0.5 GHz	23.7
	@ 1.0 GHz	33.6
	@ 5.0 GHz	75.9
	@ 10.0 GHz	108
	@ 18.0 GHz	146.1
	@ 26.5 GHz	178.4
	@ 40.0 GHz	220.9
	@ 50.0 GHz	248.3
	@ 65.0 GHz	285.1
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	92.7
	@ 1.0 GHz	65.4
	@ 5.0 GHz	29.1
	@ 10.0 GHz	20.5
	@ 18.0 GHz	15.2
	@ 26.5 GHz	12.4
	@ 40.0 GHz	10.1
	@ 50.0 GHz	9
	@ 65.0 GHz	7.8
@ 90.0 GHz	6.6	