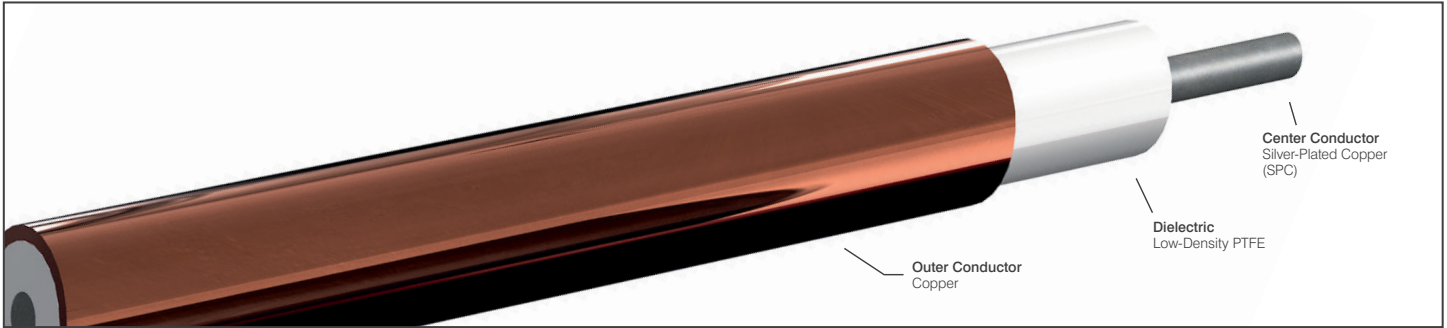


# Low-Loss Semi-Rigid Coaxial Cables

P/N UT-047C-LL | 50 Ω Copper 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	0.047 ± 0.001
	mm	1.194 ± 0.025
Center Conductor Diameter	in	0.0080
	mm	0.2032
Length (Maximum)	Feet	20
	Meter	6.10

### MATERIALS

Outer Conductor	Copper
Outer Conductor Plating	None
Dielectric	LD PTFE
Center Conductor	SPC
RoHS Compliant	✓

### MECHANICAL CHARACTERISTICS\*

Outer Conductor Integrity Temp.	°C	250
Operating Temperature (Max)	°C	250
Inside Bend Radius (Minimum)	in	0.125
	mm	3.175
Weight	lbs / 100ft	0.39
	kg / 100m	0.59

\* 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	21.9
	@ 1.0 GHz	31.1
	@ 5.0 GHz	70.2
	@ 10.0 GHz	100
	@ 18.0 GHz	135.2
	@ 26.5 GHz	165.2
	@ 40.0 GHz	204.8
	@ 50.0 GHz	230.2
	@ 90.0 GHz	314.4
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	125.6
	@ 1.0 GHz	88.7
	@ 5.0 GHz	39.4
	@ 10.0 GHz	27.7
	@ 18.0 GHz	20.5
	@ 26.5 GHz	16.8
	@ 40.0 GHz	13.6
	@ 50.0 GHz	12.1
	@ 90.0 GHz	8.9