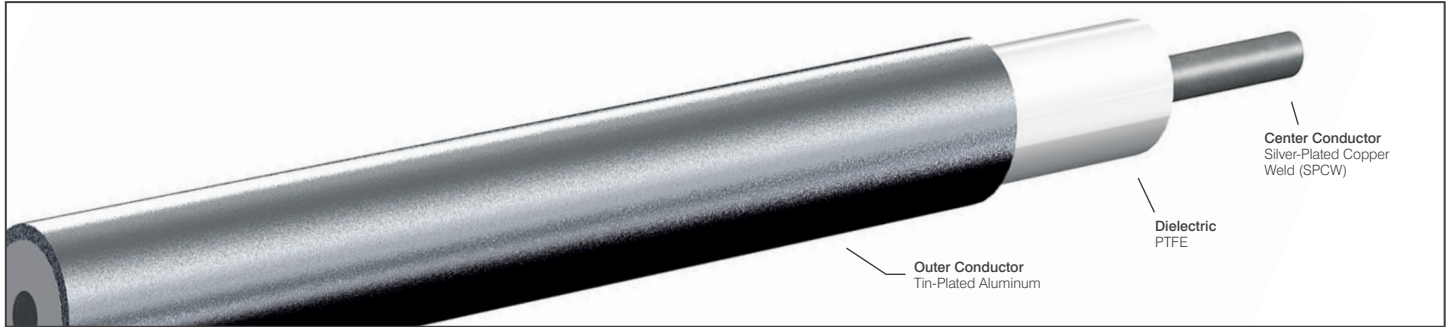


## Semi-Rigid Coaxial Cables

P/N UT-047-AL-TP | 50 Ω Tin-Plated Aluminum Outer Conductor

### INTRODUCTION



Our 50 Ω aluminum semi-rigid cables are ideal for hand forming or where weight savings is a premium. Connectors can be easily soldered to the tin-plated aluminum outer conductor.

### DIMENSIONS

Outer Conductor Diameter	in	0.047 + 0.002/-0.001
	mm	1.194 + 0.051/-0.025
Center Conductor Diameter	in	0.0113
	mm	0.2870
Length (Maximum)	Feet	20
	Meter	6.10

### MATERIALS

Outer Conductor	Aluminum
Outer Conductor Plating	Tin
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	0.070
	mm	1.778
Weight	lbs / 100ft	0.21
	kg / 100m	0.32

\* 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	1000
Voltage Withstanding	VRMS @ 60 Hz	3000
Higher Order Mode Frequency	GHz	109.0
Attenuation (Db / 100 Ft Typical)	@ 0.5 GHz	25.8
	@ 1.0 GHz	36.7
	@ 5.0 GHz	84.5
	@ 10.0 GHz	121.9
	@ 18.0 GHz	167.3
	@ 26.5 GHz	206.9
	@ 40.0 GHz	260.4
	@ 50.0 GHz	295.5
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	85.4
	@ 1.0 GHz	60.1
	@ 5.0 GHz	26.3
	@ 10.0 GHz	18.3
	@ 18.0 GHz	13.4
	@ 26.5 GHz	10.9
	@ 40.0 GHz	8.7
	@ 50.0 GHz	7.7
	@ 65.0 GHz	6.7
	@ 90.0 GHz	5.5