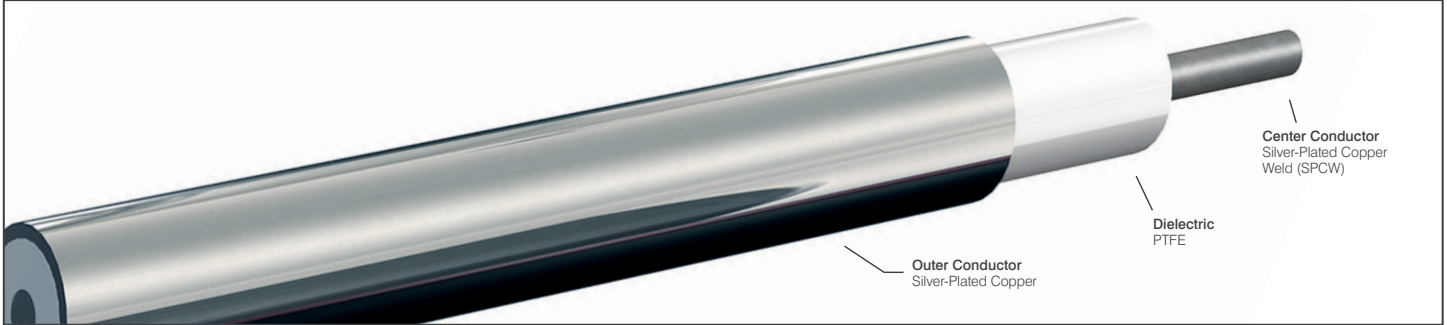


## Semi-Rigid Coaxial Cables

P/N UT-047-SP | 50 Ω Silver-Plated Copper Outer Conductor

### INTRODUCTION



All of our 50 Ω copper semi-rigid cables feature low attenuation and VSWR covering the entire microwave spectrum. With numerous connector options available off-the-shelf, this family of cables is one of the most versatile available today. They meet the demands of package density and provide total shielding for elimination of signal loss and noise.

### 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	Copper
Outer Conductor Plating	Silver
Dielectric	PTFE
Center Conductor	SPCW
RoHS Compliant	✓

### MECHANICAL CHARACTERISTICS\*

Outer Conductor Integrity Temp.	°C	175
Operating Temperature (Max)	°C	150
Inside Bend Radius (Minimum)	in	0.050
	mm	1.270
Weight	lbs / 100ft	0.40
	kg / 100m	0.60

\* 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	24
	@ 1.0 GHz	34.2
	@ 5.0 GHz	78.8
	@ 10.0 GHz	113.8
	@ 18.0 GHz	156.5
	@ 26.5 GHz	193.8
	@ 40.0 GHz	244.2
	@ 50.0 GHz	277.5
Power (Watts Cw @ 20 °C, Maximum)	@ 65.0 GHz	323
	@ 90.0 GHz	391.3
	@ 0.5 GHz	62.2
	@ 1.0 GHz	43.8
	@ 5.0 GHz	19.1
	@ 10.0 GHz	13.3
	@ 18.0 GHz	9.7
	@ 26.5 GHz	7.9
	@ 40.0 GHz	6.3
	@ 50.0 GHz	5.5
@ 65.0 GHz	4.8	
@ 90.0 GHz	4	