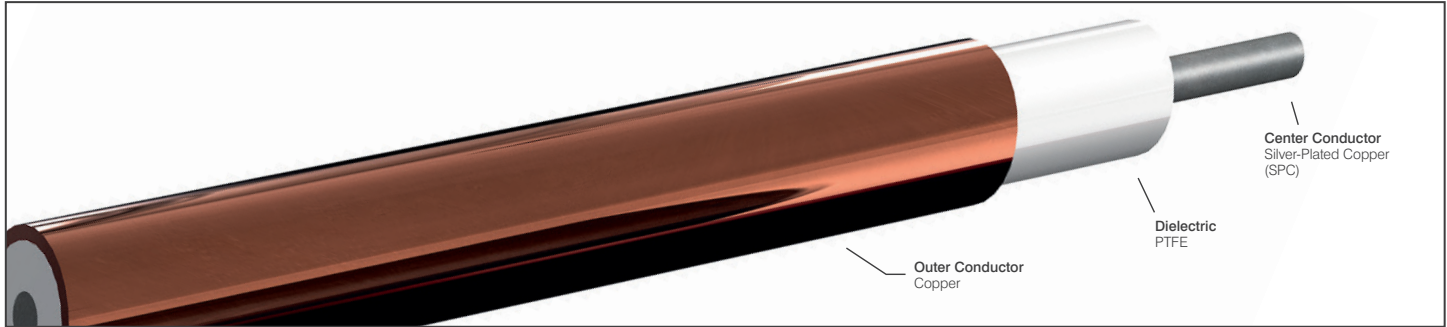


Semi-Rigid Coaxial Cables

P/N UT-047C | 50 Ω 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 ± 0.001
	mm	1.194 ± 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	None
Dielectric	PTFE
Center Conductor	SPC
RoHS Compliant	✓

MECHANICAL CHARACTERISTICS*

Outer Conductor Integrity Temp.	°C	175
Operating Temperature (Max)	°C	150
Inside Bend Radius (Minimum)	in	0.125
	mm	3.175
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	80.5
	@ 1.0 GHz	56.6
	@ 5.0 GHz	24.7
	@ 10.0 GHz	17.2
	@ 18.0 GHz	12.6
	@ 26.5 GHz	10.2
	@ 40.0 GHz	8.1
	@ 50.0 GHz	7.2
@ 65.0 GHz	6.2	
@ 90.0 GHz	5.1	