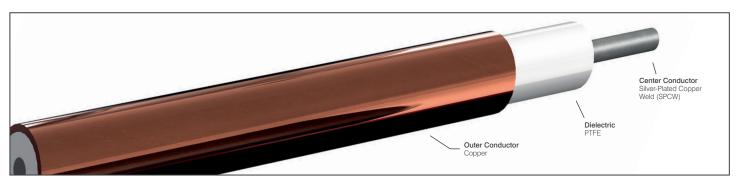


## **Semi-Rigid Coaxial Cables**

P/N UT-085-M17 | 50 Ω Copper Outer Conductor

## INTRODUCTION



All of our 50  $\Omega$  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	$0.0865 \pm 0.0010$
	mm	2.1971 ± 0.0254
Center Conductor Diameter	in	0.0201
	mm	0.5105
Length (Maximum)	Feet	20
	Meter	6.10

## MATERIALS

Outer Conductor	Copper
Outer Conductor Plating	None
Dielectric	PTFE
Center Conductor	SPCW
RoHS Compliant	✓

MECHANICAL CHARACTERISTICS*				
Outer Conductor Integrity Temp.	°C	175		
Operating Temperature (Max)	°C	125		
Inside Bend Radius (Minimum)	in	0.050		
	mm	1.270		
Weight	lbs / 100ft	1.42		
	kg / 100m	2.13		

\* 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	1500		
Voltage Withstanding	VRMS @ 60 Hz	5400		
Higher Order Mode Frequency	GHz	61.0		
	@ 0.5 GHz	13.6		
	@ 1.0 GHz	19.5		
	@ 5.0 GHz	46		
	@ 10.0 GHz	67.4		
Attenuation (Db / 100 Ft Typical)	@ 18.0 GHz	94.3		
	@ 26.5 GHz	118.3		
	@ 40.0 GHz	151.5		
	@ 50.0 GHz	173.8		
	@ 65.0 GHz	N/A		
	@ 90.0 GHz	N/A		
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	232		
	@ 1.0 GHz	162.5		
	@ 5.0 GHz	69.8		
	@ 10.0 GHz	47.9		
	@ 18.0 GHz	34.6		
	@ 26.5 GHz	27.7		
	@ 40.0 GHz	21.8		
	@ 50.0 GHz	19.1		
	@ 65.0 GHz	N/A		
	@ 90.0 GHz	N/A		



See our complete line of Semi-Rigid Coaxial Cables at: CarlisleIT.com/products/wire-cable/semi-rigid-coaxial-cables +1 (800) 458-9960 Sales@CarlislelT.com