Amphenol

Cable & Interconnect Technologies Wire & Cable

## **Semi-Rigid Coaxial Cables**

P/N UT-085-SP-M17 | 50 Ω Silver-Plated 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 + 0.002 /-0.0010
	mm	2.1971 + 0.0508 /-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	Silver
Dielectric	PTFE
Center Conductor	SPC
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	1.43		
	kg / 100m	2.15		

\* 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		
Attenuation (Db / 100 Ft Typical)	@ 0.5 GHz	13.6		
	@ 1.0 GHz	19.5		
	@ 5.0 GHz	46		
	@ 10.0 GHz	67.4		
	@ 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	173.5		
	@ 1.0 GHz	121.5		
	@ 5.0 GHz	52.2		
	@ 10.0 GHz	35.8		
	@ 18.0 GHz	25.8		
	@ 26.5 GHz	20.7		
	@ 40.0 GHz	16.3		
	@ 50.0 GHz	14.3		
	@ 65.0 GHz	N/A		
	@ 90.0 GHz	N/A		

Learn More: Amphenol-CIT.com

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