AmphenolCIT Cable & Interconnect Technologies Wire & Cable

Semi-Rigid Coaxial Cables

P/N UT-047-TP-M17 | 50 Ω Tin-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	Tin
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		
	@ 65.0 GHz	323		
	@ 90.0 GHz	391.3		
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	67.5		
	@ 1.0 GHz	47.4		
	@ 5.0 GHz	20.7		
	@ 10.0 GHz	14.4		
	@ 18.0 GHz	10.5		
	@ 26.5 GHz	8.5		
	@ 40.0 GHz	6.8		
	@ 50.0 GHz	6		
	@ 65.0 GHz	5.2		
	@ 90.0 GHz	4.3		

Learn More: Amphenol-CIT.com

+1 (800) 458-9960