AmphenolCIT Cable & Interconnect Technologies Wire & Cable

Semi-Rigid Coaxial Cables

P/N UT-141C-TP | 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	0.141 + 0.002 /-0.001
	mm	3.581 + 0.051 /-0.025
Center Conductor Diameter	in	0.0362
	mm	0.9195
Length (Maximum)	Feet	20
	Meter	6.10

MATERIALS	
Outer Conductor	Copper
Outer Conductor Plating	Tin
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	0.075		
	mm	1.905		
Weight	lbs / 100ft	3.32		
	kg / 100m	4.98		

* 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	1900		
Voltage Withstanding	VRMS @ 60 Hz	9600		
Higher Order Mode Frequency	GHz	34.0		
Attenuation (Db / 100 Ft Typical)	@ 0.5 GHz	7.6		
	@ 1.0 GHz	11.3		
	@ 5.0 GHz	27.6		
	@ 10.0 GHz	41.6		
	@ 18.0 GHz	59.6		
	@ 26.5 GHz	76.2		
	@ 40.0 GHz	N/A		
	@ 50.0 GHz	N/A		
	@ 65.0 GHz	N/A		
	@ 90.0 GHz	N/A		
Power (Watts Cw @ 20 °C, Maximum)	@ 0.5 GHz	483.5		
	@ 1.0 GHz	336.2		
	@ 5.0 GHz	140.4		
	@ 10.0 GHz	94.6		
	@ 18.0 GHz	66.8		
	@ 26.5 GHz	52.7		
	@ 40.0 GHz	N/A		
	@ 50.0 GHz	N/A		
	@ 65.0 GHz	N/A		
	@ 90.0 GHz	N/A		

Learn More: Amphenol-CIT.com

+1 (800) 458-9960