

Semi-Rigid Coaxial Cables

P/N UT-085-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	0.0865 + 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	Tin
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
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
Power (Watts Cw @ 20 °C, Maximum)	@ 65.0 GHz	N/A
	@ 90.0 GHz	N/A
	@ 0.5 GHz	190.3
	@ 1.0 GHz	133.2
	@ 5.0 GHz	57.2
	@ 10.0 GHz	39.3
	@ 18.0 GHz	28.3
	@ 26.5 GHz	22.7
	@ 40.0 GHz	17.9
	@ 50.0 GHz	15.7
@ 65.0 GHz	N/A	
@ 90.0 GHz	N/A	