

# Standard non-50 ohm Impedance Semi-Rigid Cables

CarlisleIT Description		UT-062C-18	UT-034-25	UT-038C-25	UT-047C-25	UT-070C-25
CarlisleIT Description (Tin Plated)		UT-062C-18-TP	UT-034-25-TP	UT-038C-25-TP	UT-047C-25-TP	UT-070C-25-TP
Dimensions	Units					
Outer Conductor Diameter (+ 0.001 inch for tin plate)	inch	0.062 ± 0.001	0.034 ± 0.001	0.038 ± 0.002	0.047 ± 0.003	0.070 ± 0.001
	millimeter	1.575 ± 0.025	0.864 ± 0.025	0.965 ± 0.051	1.194 ± 0.076	1.778 ± 0.025
Center Conductor Diameter	inch	0.0320 ± 0.0005	0.0126 ± 0.0005	0.0159 ± 0.0005	0.0159 ± 0.0005	0.0314 ± 0.0005
	millimeter	0.8128 ± 0.0127	0.3200 ± 0.0127	0.4039 ± 0.0127	0.4039 ± 0.0127	0.7976 ± 0.0127
Straight Length (Maximum)	feet	20	15	15	20	20
	meter	6.10	4.57	4.57	6.10	6.10
<b>Materials</b>						
Outer Conductor		Copper	Copper	Copper	Copper	Copper
Outer Conductor Plating		None	None	None	None	None
Dielectric		PTFE	PTFE	PTFE	PTFE	PTFE
Center Conductor		SPC	SPCW	SPC	SPC	SPC
RoHS Compliant		Yes	Yes	Yes	Yes	Yes
<b>Mechanical Characteristics</b>						
Outer Conductor Integrity Temp.	°C	150	175	175	175	150
Operating Temperature (Max.)	°C	125	150	150	150	125
Inside Bend Radius (Minimum)	inch	0.125	0.060	0.125	0.125	0.125
	millimeter	3.175	1.270	3.175	3.175	3.175
Weight	lbs/100 ft	0.89	0.28	0.33	0.58	1.04
	kg/100 m	1.34	0.42	0.50	0.87	1.56
<b>Electrical Characteristics</b>						
Characteristic Impedance	ohm	18.0 ± 2.0	25.0 ± 2.0	25.0 ± 3.0	25.0 ± 3.0	25.0 ± 1.5
Capacitance	pF/ft	30.6	58.0	58.0	58.0	58.0
	pF/m	264.4	190.4	190.4	190.4	190.4
Velocity of Propagation	%	70	70	70	70	70
Corona Extinction Voltage	VRMS @ 60 Hz	1100	200	200	850	1500
Voltage Withstanding	VRMS @ 60 Hz	2100	1200	1500	1500	3000
Higher Order Mode Frequency	GHz	65	148	120	120	60
Attenuation (dB/100 ft, Typical)	0.5 GHz	29.8	49.9	42.6	42.6	21.2
	1.0 GHz	42.4	70.7	60.5	60.5	30.3
	5.0 GHz	97.0	160.5	137.6	137.6	70.0
	10.0 GHz	139.6	229.4	197.1	197.1	101.4
	18.0 GHz	191.1	311.6	268.2	268.2	139.8
	26.5 GHz	235.8	382.0	329.3	329.3	173.5
	40.0 GHz	295.9	475.5	410.7	410.7	219.4
	50.0 GHz	335.2	536.0	463.6	463.6	249.7
Power (Watts CW @ 20 °C, Maximum for non plated outer conductor)	0.5 GHz	66.7	30.0	38.4	45.6	103.2
	1.0 GHz	46.9	21.2	27.1	32.2	72.5
	5.0 GHz	20.6	9.4	12.0	14.2	31.5
	10.0 GHz	14.3	6.6	8.4	9.9	21.9
	18.0 GHz	10.5	4.8	6.2	7.3	15.9
	26.5 GHz	8.6	4.0	5.0	6.0	12.9
	40.0 GHz	6.8	3.2	4.0	4.8	10.2
	50.0 GHz	6.1	2.8	3.6	4.3	9.0
	65.0 GHz	5.2	2.5	3.1	3.7	-
	90.0 GHz	-	2.1	2.6	3.1	-