

# Standard non-50 ohm Impedance Semi-Rigid Cables

CarlisleIT Description		UT-141C-35	UT-047-70	UT-141-70	UT-141C-70	UT-085-75	UT-141-75
CarlisleIT Description (Tin Plated)		UT-141C-35-TP	UT-047-70-TP	UT-141-70-TP	UT-141C-70-TP	UT-085-75-TP	UT-141-75-TP
Dimensions		Units					
Outer Conductor Diameter (+ 0.001 inch for tin plate)	inch	0.141 ± 0.001	0.047 ± 0.001	0.141 ± 0.001	0.141 ± 0.001	0.085 +0.002/-0.001	0.141 ± 0.001
	millimeter	3.581 ± 0.025	1.194 ± 0.025	3.581 ± 0.025	3.581 ± 0.025	2.159 +0.051/-0.025	3.581 ± 0.025
Center Conductor Diameter	inch	0.0508 ± 0.0010	0.0071 ± 0.0005	0.0201 ± 0.0005	0.0226 ± 0.0005	0.0113 ± 0.0005	0.0201 ± 0.0005
	millimeter	1.2903 ± 0.0254	0.1803 ± 0.0127	0.5105 ± 0.0127	0.5740 ± 0.0127	0.2870 ± 0.0127	0.5105 ± 0.0127
Straight Length (Maximum)	feet	20	20	20	20	20	20
	meter	6.10	6.10	6.10	6.10	6.10	6.10
Materials							
Outer Conductor		Copper	Copper	Copper	Copper	Copper	Copper
Outer Conductor Plating		None	None	None	None	Tin	None
Dielectric		PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Center Conductor		SPC	SPCW	SPCW	SPC	SPCW	SPCW
RoHS Compliant		Yes	Yes	Yes	Yes	Yes	Yes
Mechanical Characteristics							
Outer Conductor Integrity Temp.	°C	175	175	150	150	150	175
Operating Temperature (Max.)	°C	125	150	125	125	125	125
Inside Bend Radius (Minimum)	inch	0.250	0.050	0.188	0.188	0.125	0.075
	millimeter	6.350	1.270	4.775	4.775	3.175	1.905
Weight	lbs/100 ft	3.66	0.37	3.87	3.13	1.26	3.09
	kg/100 m	5.49	0.56	5.81	4.70	1.88	4.64
Electrical Characteristics							
Characteristic Impedance	ohm	35.0 ± 2.	70.0 ± 1.5	70.0 ± 1.0	70.0 ± 1.0	75.0 ± 1.0	75.0 ± 1.5
Capacitance	pF/ft	41.5	20.7	20.7	20.7	19.3	19.3
	pF/m	136.0	68.0	68.0	68.0	63.5	63.5
Velocity of Propagation	%	70	70	70	70	70	70
Corona Extinction Voltage	VRMS @ 60 Hz	1500	1000	2000	1500	1200	2000
Voltage Withstanding	VRMS @ 60 Hz	7800	3600	9600	11100	6600	11400
Higher Order Mode Frequency	GHz	31	117	43	38	67	38
Attenuation (dB/100 ft, Typical)	0.5 GHz	8.6	24.6	9.2	8.2	14.5	8.4
	1.0 GHz	12.4	35.0	13.3	11.8	20.7	12.1
	5.0 GHz	30.1	80.5	32.0	28.7	48.7	29.4
	10.0 GHz	45.0	118.2	47.7	43.0	71.3	44.1
	18.0 GHz	64.1	159.8	67.8	61.5	99.4	62.9
	26.5 GHz	81.7	197.7	86.2	78.5	124.5	80.2
	40.0 GHz	-	249.1	112.1	-	159.1	-
	50.0 GHz	-	282.9	-	-	182.3	-
	65.0 GHz	-	329.2	-	-	214.5	-
Power (Watts CW @ 20 °C, Maximum for non plated outer conductor)	0.5 GHz	552.5	78.1	409.5	463.2	144.0	549.1
	1.0 GHz	384.6	55.0	285.4	322.2	100.8	382.3
	5.0 GHz	161.5	24.0	120.2	134.7	43.4	160.6
	10.0 GHz	109.2	16.7	81.5	90.9	29.8	108.6
	18.0 GHz	77.5	12.2	57.9	64.3	21.5	77.1
	26.5 GHz	61.3	9.9	46.0	50.8	17.3	61.0
	40.0 GHz	-	7.9	35.7	-	13.6	-
	50.0 GHz	-	7.0	-	-	11.9	-
	65.0 GHz	-	6.0	-	-	10.2	-
90.0 GHz	-	5.0	-	-	-	-	