

Standard non-50 ohm Impedance Semi-Rigid Cables

CarlisleIT Description		UT-090C-25	UT-141C-25	UT-064SS-SS-30	UT-047C-35	UT-090C-35
CarlisleIT Description (Tin Plated)		UT-090C-25-TP	UT-141C-25-TP	-	UT-047C-35-TP	UT-090C-35-TP
Dimensions		Units				
Outer Conductor Diameter (+ 0.001 inch for tin plate)	inch	0.090 ± 0.001	0.141 ± 0.001	0.064 +0.002/-0.001	0.047 ± 0.001	0.090 ± 0.001
	millimeter	2.286 ± 0.025	3.581 ± 0.025	1.626 +0.051/-0.025	1.194 ± 0.025	2.286 ± 0.025
Center Conductor Diameter	inch	0.0403 ± 0.0010	0.0640 ± 0.0010	0.0201 ± 0.0010	0.0159 ± 0.0005	0.0320 ± 0.0010
	millimeter	1.0236 ± 0.0254	1.6256 ± 0.0254	1.6256 ± 0.0254	0.4039 ± 0.0127	0.8128 ± 0.0254
Straight Length (Maximum)	feet	20	20	20	20	20
	meter	6.10	6.10	6.10	6.10	6.10
Materials						
Outer Conductor		Copper	Copper	304 SS	Copper	Copper
Outer Conductor Plating		None	None	None	None	None
Dielectric		PTFE	PTFE	PTFE	PTFE	PTFE
Center Conductor		SPC	SPC	304 SS	SPC	SPC
RoHS Compliant		Yes	Yes	Yes	Yes	Yes
Mechanical Characteristics						
Outer Conductor Integrity Temp.	°C	175	175	225	175	150
Operating Temperature (Max.)	°C	125	125	200	150	125
Inside Bend Radius (Minimum)	inch	0.125	0.188	0.25	0.125	0.125
	millimeter	3.175	4.775	6.35	3.175	3.175
Weight	lbs/100 ft	1.69	4.02	0.88	0.43	1.51
	kg/100 m	2.54	6.04	1.31	0.65	2.27
Electrical Characteristics						
Characteristic Impedance	ohm	25.0 ± 1.0	25.0 ± 1.0	30.0 ± 4.0	35.0 ± 1.5	35.0 ± 1.0
Capacitance	pF/ft	58.0	58.0	48.4	41.5	41.5
	pF/m	190.4	190.4	158.7	136.0	136.0
Velocity of Propagation	%	70	70	70	70	70
Corona Extinction Voltage	VRMS @ 60 Hz	750	1000	900	850	1500
Voltage Withstanding	VRMS @ 60 Hz	3900	6300	2700	2400	4800
Higher Order Mode Frequency	GHz	46	29	85	100	50
Attenuation (dB/100 ft, Typical)	0.5 GHz	16.1	10.1	161.7	26.2	13.3
	1.0 GHz	23.0	14.6	228.9	37.3	19.1
	5.0 GHz	53.8	34.8	514.1	85.7	45.1
	10.0 GHz	78.5	51.7	729.5	123.6	66.2
	18.0 GHz	109.2	73.2	982.6	169.7	92.6
	26.5 GHz	136.3	92.7	1196.1	209.8	116.2
	40.0 GHz	173.7	-	1475.7	263.9	148.9
	50.0 GHz	-	-	1654.3	299.4	170.9
	65.0 GHz	-	-	1892.8	348.1	-
Power (Watts CW @ 20 °C, Maximum for non plated outer conductor)	0.5 GHz	205.1	472.5	23.5	74.1	200.7
	1.0 GHz	143.8	329.7	16.6	52.1	140.4
	5.0 GHz	62.1	139.7	7.4	22.8	60.2
	10.0 GHz	42.8	95.0	5.2	15.9	41.3
	18.0 GHz	31.0	67.8	3.9	11.6	29.7
	26.5 GHz	25.0	54.0	3.2	9.4	23.8
	40.0 GHz	19.7	-	2.6	7.5	18.7
	50.0 GHz	-	-	2.3	6.7	16.4
	65.0 GHz	-	-	2.0	5.8	-
90.0 GHz	-	-	-	4.8	-	