Standard non-50 ohm Impedance Semi-Rigid Cables

Cables with impedances from 10 to 100 ohms and diameters from 0.020 to 0.250 inch, CarlisleIT's ODD impedance Semi-Rigid cables are the right solution for any impedance matching requirement.

CarlisleIT Description		UT-034C-10	UT-043C-10	UT-070C-10	UT-075C-10	UT-044-12
CarlisleIT Description (Tin Plated)		UT-034C-10-TP	UT-043C-10-TP	UT-070C-10-TP	UT-075C-10-TP	UT-044-12-TP
Dimensions	Units					
Outer Conductor Diameter (+ 0.001 inch for tin plate)	inch	0.034 ± 0.001	0.043 ± 0.001	0.070 ± 0.001	0.075 ± 0.001	0.044 ± 0.002
	millimeter	0.864 ± 0.025	1.092 ± 0.025	1.778 ± 0.025	1.905 ± 0.025	1.118 ± 0.051
Center Conductor Diameter	inch	0.0201 ± 0.0005	0.0285 ± 0.0005	0.0403 ± 0.0005	0.0453 ± 0.0010	0.0226 ± 0.0005
	millimeter	0.5105 ± 0.0127	0.7239 ± 0.0127	1.0236 ± 0.0127	1.1506 ± 0.0254	0.5740 ± 0.0127
Straight Length (Maximum)	feet	15	15	20	20	15
	meter	4.57	4.57	6.10	6.10	4.57
Materials						
Outer Conductor		Copper	Copper	Copper	Copper	Copper
Outer Conductor Plating		None	None	None	None	None
Dielectric		PFA	PFA	PTFE	PTFE	PFA
Center Conductor		SPC	SPC	SPC	SPC	SPCW
RoHS Compliant		Yes	Yes	Yes	Yes	Yes
Mechanical Characteristics						
Outer Conductor Integrity Temp.	°C	175	175	150	150	175
Operating Temperature (Max.)	°C	150	150	125	125	150
Inside Bend Radius (Minimum)	inch	0.125	0.125	0.125	0.125	0.125
	millimeter	3.175	3.175	3.175	3.175	3.175
Weight	lbs/100 ft	0.32	0.47	1.35	1.50	0.51
	kg/100 m	0.48	0.71	2.03	2.26	0.77
Electrical Characteristics						
Characteristic Impedance	ohm	10.0 ± 1.5	10.0 ± 1.5	10.0 ± 2.0	10.0 ± 1.0	12.0 ± 2.0
Capacitance	pF/ft	145.1	145.1	145.1	145.1	120.9
	pF/m	476.0	476.0	476.0	476.0	396.6
Velocity of Propagation	%	70	70	70	70	70
Corona Extinction Voltage	VRMS @ 60 Hz	200	200	500	500	150
Voltage Withstanding	VRMS @ 60 Hz	600	900	1200	1500	900
Higher Order Mode Frequency	GHz	117	82	58	51	100
Attenuation (dB/100 ft, Typical)	0.5 GHz	100.2	66.7	50.7	42.2	66.9
	1.0 GHz	142.0	93.2	72.0	59.9	94.9
	5.0 GHz	320.3	211.3	163.3	136.2	215.0
	10.0 GHz	456.0	301.9	233.4	195.1	307.1
	18.0 GHz	616.6	409.8	316.9	265.6	416.7
	26.5 GHz	752.9	502.0	388.4	326.1	510.5
	40.0 GHz	932.8	624.5	483.4	406.8	634.9
	50.0 GHz	1,048.4	703.7	544.8	459.2	715.3
	65.0 GHz	1,203.6	810.7	-	-	823.9
	90.0 GHz	1,430.4	-	-	-	983.6
Power (Watts CW @ 20 °C, Maximum for non plated outer conductor)	0.5 GHz	15.0	27.6	43.2	55.0	27.6
	1.0 GHz	10.6	19.5	30.5	38.8	19.5
	5.0 GHz	4.7	8.6	13.5	17.1	8.6
	10.0 GHz	3.3	6.0	9.5	12.0	6.0
	18.0 GHz	2.4	4.5	7.0	8.8	4.5
	26.5 GHz	2.0	3.6	5.7	7.2	3.7
	40.0 GHz	1.6	2.9	4.6	5.8	2.9
	50.0 GHz	1.4	2.6	4.1	5.1	2.6
	65.0 GHz	1.3	2.3	-	-	2.3
	90.0 GHz	1.1	-	-	-	1.9