

Standard Aluminum 50 ohm Semi-Rigid Cables sales@qiidao.com

Standard aluminum 50 ohm semi-rigid cables are ideal for hand forming or where weight savings is a premium. Connectors can be easily soldered to the tin plated aluminum outer conductor.

CarlisleIT Description		UT-047-AL-TP	UT-085-AL	UT-085-AL-TP
MIL-DTL-17 Description		-	UT-085-AL-M17	UT-085-AL-TP-M17
MIL-DTL-17 Part Number		-	M17/133-00012	M17/133-00013
Dimensions		Units		
Outer Conductor Diameter	inch	0.047 +0.002/-0.001	0.0865 ± 0.0010	0.0865 +0.0020/-0.0010
	millimeter	1.194 +0.051/-0.025	2.197 ± 0.025	2.197 +0.051/-0.025
Dielectric Diameter	inch	-	0.066 ± 0.001	0.066 ± 0.001
	millimeter	-	1.676 ± 0.025	1.676 ± 0.025
Center Conductor Diameter	inch	0.0113 ± 0.0005	0.0201 ± 0.0005	0.0201 ± 0.0005
	millimeter	0.2870 ± 0.0127	0.5105 ± 0.0127	0.5105 ± 0.0127
Straight Length (Maximum)	feet	20	20	20
	meter	6.10	6.10	6.10
Coiled Length (Maximum) ¹	feet	50	150	150
	meter	15.24	45.72	45.72

¹ Add "TYPE" to the part description for coiled lengths, example: UT-034-TYPE

Materials				
Outer Conductor	Aluminum	Aluminum	Aluminum	Aluminum
Outer Conductor Plating	Tin	None	Tin	Tin
Dielectric	PTFE	PTFE	PTFE	PTFE
Center Conductor	SPCW	SPCW	SPCW	SPCW
RoHS Compliant	Yes	Yes	Yes	Yes

Mechanical Characteristics				
Outer Conductor Integrity Temp.	°C	225	225	225
Operating Temperature (Max.)	°C	225	225	225
Inside Bend Radius (Minimum)	inch	0.070	0.070	0.070
	millimeter	1.778	1.778	1.778
Weight	lbs/100 ft	0.21	0.72	0.72
	kg/100 m	0.32	1.08	1.08

Electrical Characteristics				
Characteristic Impedance	ohm	50.0 ± 1.5	50.0 ± 1.0	50.0 ± 1.0
Capacitance	pF/ft	29.0	29.0	29.0
	pF/m	95.2	95.2	95.2
Velocity of Propagation	%	70	70	70
Corona Extinction Voltage	VRMS @ 60 Hz	1000	1500	1500
Voltage Withstanding	VRMS @ 60 Hz	3000	5400	5400
Higher Order Mode Frequency	GHz	109	61	61
Attenuation (dB/100 ft, Typical)	0.5 GHz	25.8	14.3	14.3
	1.0 GHz	36.7	21.0	21.0
	5.0 GHz	84.5	47.6	47.6
	10.0 GHz	121.9	72.0	72.0
	18.0 GHz	167.3	100.3	100.3
	26.5 GHz	206.9	125.6	125.6
	40.0 GHz	260.4	160.5	160.5
	50.0 GHz	295.5	183.9	183.9
	65.0 GHz	343.6	-	-
	90.0 GHz	415.5	-	-
Power (Watts CW @ 20 °C, Maximum)	0.5 GHz	85.4	231.8	237.5
	1.0 GHz	60.1	162.5	166.5
	5.0 GHz	26.3	70.1	71.9
	10.0 GHz	18.3	48.3	49.5
	18.0 GHz	13.4	35.0	35.8
	26.5 GHz	10.9	28.1	28.8
	40.0 GHz	8.7	22.2	22.8
	50.0 GHz	7.7	19.5	20.0
	65.0 GHz	6.7	-	-
	90.0 GHz	5.5	-	-