

STANDARD ALUMINUM 50 OHM Semi-Rigid CABLES

Micro-Coax Description	UT-141A-AL	UT-141A-AL-TP	UT-250C-AL-TP
MIL-DTL-17 Description	UT-141-SA-AL-M17	UT-141-SA-AL-TP-M17	-
MIL-DTL-17 Part Number	M17/133-00008	M17/133-00009	-

DIMENSIONS

	Units			
Outer Conductor Diameter	inch	0.141 ± 0.001	0.141 +0.002/-0.001	0.250 +0.003/-0.002
	millimeter	3.581 ± 0.025	3.581 +0.051/-0.025	6.350 +0.076/-0.051
Dielectric Diameter	inch	0.1175 ± 0.0010	0.1175 ± 0.0010	-
	millimeter	2.985 ± 0.025	2.985 ± 0.025	-
Center Conductor Diameter	inch	0.0362 ± 0.0007	0.0362 ± 0.0007	0.0641 ± 0.0010
	millimeter	0.9195 ± 0.0178	0.9195 ± 0.0178	1.6281 ± 0.0254
Straight Length (Maximum)	feet	20	20	20
	meter	6.10	6.10	6.10
Coiled Length (Maximum) ¹	feet	150	150	150
	meter	45.72	45.72	45.72

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

MATERIALS

Outer Conductor	Aluminum	Aluminum	Aluminum
Outer Conductor Plating	None	Tin	Tin
Dielectric	PTFE	PTFE	PTFE
Center Conductor	SPCW	SPCW	SPC
RoHS Compliant	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	0.125	0.125	0.250
	millimeter	3.175	3.175	6.350
Weight	lbs/100 ft	1.93	1.93	6.18
	kg/100 m	2.90	2.90	9.28

ELECTRICAL CHARACTERISTICS

Characteristic Impedance	ohm	50.0 ± 1.0	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	1900	1900	3000
Voltage Withstanding	VRMS @ 60 Hz	9600	9600	16800
Higher Order Mode Frequency	GHz	34	34	19
Attenuation (dB/100 ft, Typical)	0.5 GHz	7.9	7.9	4.9
	1.0 GHz	11.5	11.5	7.2
	5.0 GHz	28.7	28.7	18.4
	10.0 GHz	43.3	43.3	28.4
	18.0 GHz	63.0	63.0	42.0
	26.5 GHz	80.3	80.3	-
	40.0 GHz	-	-	-
	50.0 GHz	-	-	-
	65.0 GHz	-	-	-
Power (Watts CW @ 20 °C, Maximum)	0.5 GHz	557.7	571.7	1,395.1
	1.0 GHz	388.5	398.2	961.1
	5.0 GHz	163.4	167.5	387.6
	10.0 GHz	110.6	113.4	255.3
	18.0 GHz	78.5	80.5	176.2
	26.5 GHz	62.2	63.8	-
	40.0 GHz	-	-	-
	50.0 GHz	-	-	-
	65.0 GHz	-	-	-
90.0 GHz	-	-	-	