

Cable Specifications

75 Ohm Transline Cable 5/8"

Description	Product Number
Standard Cable	
5/8", Black Polyethylene Jacket	AT058J75
Fire Retardant Jacket	
5/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT058FX75
Riser Rated Cable	
5/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, UL-1666, CMR, IEC332-1, IEC332-3C	AT058R75
Physical Dimensions	
Center Dia., in (mm)	0.185 (4.7)
Dia. Over Dielectric, in (mm)	0.712 (18.08)
Dia. Over Outer Conductor, in (mm)	0.760 (19.30)
Max. Dia. Over Jacket, in (mm)	0.892 (22.65)
Center Conductor	Copper Clad Aluminum
Outer Conductor	Solid Aluminum Tube
Electrical Characteristics	
Maximum Frequency, GHz	8
Peak Power Rating, KW	38
DC Res, Ohms/1000 ft (1000m)	
Center	0.46 (1.51)
Outer	0.23 (0.76)
DC Breakdown, kV	4.75
Capacitance, pF/ft (m)	14.9 (48.9)
Inductance, mH/ft (m)	0.083 (0.273)
Jacket Spark, kV RMS	8
Typical VSWR	< 1.1
Impedance, Ohms	75
Velocity of Propagation	93%
Mechanical Characteristics	
Min. Bend. Rad., in (mm) – Single	3 (76.2)
Min. Bend. Rad., in (mm) – Multiple	8 (203)
Cable Weight, lb/ft (kg/m)	0.20 (0.29)
Bending Moment, ft.lb (N'm)	21 (28.5)
Tensile Strength, lb (kg)	500 (227)
Flat Plate Crush, lb/in (kg/mm)	140 (2.50)
Number of Bends	20
Temperature, °F (°C)	
Recommended Install	-40 to 170 (-40 to 77)
Recommended Storage	-94 to 170 (-70 to 77)
Operating	-40 to 170 (-40 to 77)

Frequency MHz	Attenuation and Average Power		Avg. Pwr. kW
	Attenuation dB/100 ft	Attenuation dB/100m	
30	0.25	0.82	5.76
50	0.32	1.05	4.50
88	0.43	1.41	3.35
100	0.46	1.51	3.13
108	0.48	1.57	3.00
150	0.56	1.84	2.68
174	0.60	1.97	2.40
200	0.65	2.13	2.22
300	0.79	2.59	1.82
400	0.91	2.99	1.58
450	0.97	3.18	1.48
500	1.03	3.38	1.40
512	1.04	3.41	1.38
600	1.11	3.64	1.30
700	1.20	3.94	1.20
800	1.30	4.27	1.11
824	1.32	4.33	1.09
894	1.37	4.49	1.05
960	1.44	4.72	1.00
1000	1.47	4.82	0.99
1250	1.62	5.31	0.89
1500	1.77	5.81	0.81
1800	1.95	6.40	0.74
1900	2.01	6.59	0.72
2000	2.07	6.79	0.70
2300	2.29	7.51	0.63
3000	2.62	8.59	0.55

Standard conditions:

For attenuation, VSWR 1.0, ambient temperature 20°C (68°F)

For average power, VSWR 1.0, ambient temperature 40°C (104°F), inner conductor temperature 100°C (212°F), no solar loading

