

Cable Specifications Summary

50 Ohm Transline, 1/2", 7/8", 1-1/4" and 1-5/8" (5/8"-size cable is also available upon request)

Cable Size	1/2"	7/8"	1-1/4"	1-5/8"
Jacketing	Product Code	Product Code	Product Code	Product Code
Black Polyethylene Jacket	AT012J50	AT078J50	AT114J50	AT158J50
Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT012FX50	AT078FX50	AT114FX50	AT158FX50
Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1, MSHA	AT012F50	-	-	-
Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1, IEC332-3C, UL-1666, CMR	AT012R50	AT078R50	AT114R50	AT158R50
Characteristics				
Dia. Over Dielectric, in (mm)	0.470 (11.94)	0.968 (24.58)	1.480 (37.59)	1.871 (47.52)
Dia. Over Outer Conductor, in (mm)	0.510 (12.95)	1.012 (25.70)	1.524 (38.71)	1.888 (47.96)
Max. Dia. Over Jacket, in (mm)	0.642 (16.30)	1.142 (29.01)	1.654 (42.01)	2.035 (51.69)
Cable Weight, lb/ft (kg/km)	0.12 (0.18)	0.29 (0.43)	0.53 (0.789)	0.70 (1.037)
Min. Bend. Radius, in (mm) – Single	2 (50.8)	5 (127)	6 (152.4)	8 (203)
Min. Bend. Radius, in (mm) – Multiple	6 (152)	10 (254)	15 (381)	20 (508)
Tensile Strength, lb (kg)	465 (211)	734 (333.6)	1124 (511)	1500 (682)
Flat Plate Crush, lb/in (kg/mm)	62 (1.11)	132 (2.36)	122 (2.18)	150 (2.68)
Impedance, Ohms	50	50	50	50
Velocity of Propagation	91%	91%	91%	91%
Maximum Frequency, GHz	11	5	3.4	3
Attenuation, dB/100 ft (db/100 m)				
100 MHz	0.68 (2.23)	0.33 (1.08)	0.24 (0.79)	0.18 (0.61)
150 MHz	0.84 (2.76)	0.40 (1.31)	0.29 (0.95)	0.23 (0.76)
450 MHz	1.49 (4.89)	0.73 (2.40)	0.54 (1.77)	0.42 (1.39)
894 MHz	2.15 (7.05)	1.08 (3.54)	0.81 (2.66)	0.62 (2.04)
960 MHz	2.25 (7.38)	1.12 (3.67)	0.85 (2.79)	0.64 (2.13)
1800 MHz	3.16 (10.37)	1.61 (5.28)	1.25 (4.10)	0.96 (3.02)
2000 MHz	3.38 (11.09)	1.72 (5.64)	1.33 (4.36)	1.01 (3.34)
2300 MHz	3.61 (11.80)	1.87 (6.14)	1.45 (4.76)	1.10 (3.61)
3000 MHz	4.29 (14.07)	2.20 (7.22)	1.84 (6.04)	1.36 (4.46)
Average Power Rating, kW				
100 MHz	2.24	6.31	14.78	20.70
150 MHz	1.83	5.13	12.24	16.55
450 MHz	1.05	2.93	6.57	8.85
894 MHz	0.74	2.06	4.38	5.93
960 MHz	0.71	1.98	4.17	5.56
1800 MHz	0.52	1.55	2.87	3.76
2000 MHz	0.49	1.35	2.67	3.51
2300 MHz	0.46	1.25	2.44	3.20
3000 MHz	0.40	1.09	1.93	2.44

Cable Specifications Summary

75 Ohm Transline

Cable Size	1/2"	5/8"	7/8"
Jacketing	Product Code	Product Code	Product Code
Black Polyethylene Jacket	AT012J75	AT058J75	AT078J75
Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT012FX75	AT058FX75	AT078FX75
Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1, MSHA	AT012F75	-	-
Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1, IEC332-3C, UL-1666, CMR	AT012R75	AT058R75	AT078R75
Characteristics			
Dia. Over Dielectric, in (mm)	0.470 (11.94)	0.712 (18.08)	0.961 (24.41)
Dia. Over Outer Conductor, in (mm)	0.510 (12.95)	0.760 (19.30)	1.015 (25.78)
Max. Dia. Over Jacket, in (mm)	0.652 (16.56)	0.892 (22.65)	1.147 (29.13)
Weight, lb/ft (kg/m)	0.10 (0.15)	0.20 (0.29)	0.35 (0.47)
Min. Bend. Rad. in (mm) – Single	2 (50.8)	3 (76.2)	8 (203)
Min. Bend. Rad. In (mm) – Multiple	6 (152)	8 (203)	10 (254)
Tensile Strength, lb (kg)	465 (211)	500 (227)	830 (377)
Flat Plate Crush, lb/in (kg/mm)	62 (1.11)	140 (2.50)	132 (2.36)
Impedance, Ohms	75	75	75
Velocity of Propagation	93%	93%	93%
Maximum Frequency, GHz	11	8	6
Attenuation, dB/100 ft (dB/100 m)			
100 MHz	0.65 (2.13)	0.46 (1.51)	0.32 (1.05)
150 MHz	0.77 (2.53)	0.56 (1.84)	0.40 (1.31)
450 MHz	1.40 (4.59)	0.97 (3.18)	0.74 (2.43)
894 MHz	2.02 (6.63)	1.37 (4.49)	1.08 (3.54)
960 MHz	2.10 (6.89)	1.44 (4.72)	1.13 (3.71)
1800 MHz	2.86 (9.38)	1.95 (6.40)	1.62 (5.31)
2000 MHz	3.03 (9.94)	2.07 (6.79)	1.74 (5.71)
2300 MHz	3.26 (10.70)	2.29 (7.51)	1.89 (6.20)
3000 MHz	3.72 (12.2)	2.62 (8.59)	2.16 (7.09)
Average Power Rating, kW			
100 MHz	1.73	3.13	5.32
150 MHz	1.45	2.68	4.51
450 MHz	0.80	1.48	2.30
894 MHz	0.56	1.05	1.58
960 MHz	0.53	1.00	1.51
1800 MHz	0.39	0.74	1.06
2000 MHz	0.37	0.70	0.98
2300 MHz	0.34	0.63	0.90
3000 MHz	0.30	0.55	0.79

Cable Specifications

50 Ohm Transline Cable 1/2"

Description	Product Number
Standard Cable	
1/2", Black Polyethylene Jacket	AT012J50
Fire Retardant Jacket	
1/2", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT012FX50
1/2", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1, MSHA	AT012F50
Riser Rated Cable	
1/2", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, UL-1666, CMR, IEC332-1, IEC332-3C	AT012R50
Physical Dimensions	
Center Dia., in (mm)	0.188 (4.78)
Dia. Over Dielectric, in (mm)	0.470 (11.94)
Dia. Over Outer Conductor, in (mm)	0.510 (12.95)
Max. Dia. Over Jacket, in (mm)	0.642 (16.30)
Center Conductor	Copper-Clad Aluminum
Outer Conductor	Solid Aluminum
Electrical Characteristics	
Maximum Frequency, GHz	11
Peak Power Rating, KW	32
DC Res, Ohms/1000 ft (1000m)	
Center	0.46 (1.51)
Outer	0.45 (1.48)
DC Breakdown, kV	3.2
Capacitance, pF/ft (m)	22.3 (73.16)
Inductance, mH/ft (m)	0.056 (0.184)
Jacket Spark, kV RMS	8
Typical VSWR	1.3
Impedance, Ohms	50
Velocity of Propagation	91%
Mechanical Characteristics	
Min. Bend. Rad., in (mm) – Single	2 (50.8)
Min. Bend. Rad., in (mm) – Multiple	6 (152)
Cable Weight, lb/ft (kg/m)	0.12 (0.18)
Bending Moment, ft.lb (N'm)	7.5 (10.2)
Tensile Strength, lb (kg)	465 (211)
Flat Plate Crush, lb/in (kg/mm)	62 (1.11)
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	0.37	1.21	4.11
50	0.48	1.57	3.18
88	0.63	2.06	2.39
100	0.68	2.23	2.24
108	0.69	2.26	2.16
150	0.84	2.76	1.83
174	0.88	2.88	1.70
200	0.98	3.22	1.58
300	1.21	3.97	1.29
400	1.41	4.63	1.11
450	1.49	4.89	1.05
500	1.57	5.15	1.00
512	1.59	5.22	0.98
600	1.73	5.68	0.91
700	1.88	6.17	0.84
800	2.03	6.66	0.78
824	2.05	6.73	0.77
894	2.15	7.05	0.74
960	2.25	7.38	0.71
1000	2.29	7.51	0.70
1250	2.57	8.43	0.62
1500	2.85	9.35	0.57
1800	3.16	10.37	0.52
1900	3.27	10.73	0.50
2000	3.38	11.09	0.49
2300	3.61	11.80	0.46
3000	4.29	14.07	0.40

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

Product Certifications:

Transline cables and connectors are certified to exceed the strict Verizon Wireless PIM [Passive Inter Modulation] and Motorola 25kW PIP [Peak Instantaneous Power] specifications.

Cable Specifications

50 Ohm Transline Cable 5/8"

Description	Product Number
Standard Cable	
5/8", Black Polyethylene Jacket	AT058J50
Fire Retardant Jacket	
5/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT058FX50
Riser Rated Cable	
5/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, UL-1666, CMR, IEC332-1, IEC332-3C	AT058R50
Physical Dimensions	
Center Dia., in (mm)	0.283 (7.9)
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	Solid Copper Tube
Outer Conductor	Solid Aluminum Tube
Electrical Characteristics	
Maximum Frequency, GHz	7
Peak Power Rating, KW	65
DC Res, Ohms/1000 ft (1000m)	
Center	0.36 (1.18)
Outer	0.25 (0.82)
DC Breakdown, kV	5
Capacitance, pF/ft (m)	22.3 (73.16)
Inductance, mH/ft (m)	0.056 (0.184)
Jacket Spark, kV RMS	8
Typical VSWR	< 1.1
Impedance, Ohms	50
Velocity of Propagation	91%
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)	0.25 (0.38)
Bending Moment, ft.lb (N'm)	21 (28.5)
Tensile Strength, lb (kg)	920 (417)
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	0.28	0.92	8.36
50	0.36	1.17	6.46
88	0.46	1.50	4.86
100	0.50	1.64	4.56
108	0.52	1.70	4.38
150	0.62	2.03	3.71
174	0.66	2.16	3.45
200	0.72	2.36	3.21
300	0.88	2.89	2.61
400	1.01	3.31	2.26
450	1.08	3.54	2.13
500	1.14	3.74	2.02
512	1.15	3.77	1.99
600	1.23	4.04	1.84
700	1.35	4.43	1.70
800	1.45	4.76	1.58
824	1.48	4.86	1.56
894	1.54	5.05	1.50
960	1.60	5.25	1.44
1000	1.64	5.38	1.41
1250	1.86	6.10	1.26
1500	2.07	6.79	1.15
1800	2.31	7.58	1.04
1900	2.39	7.84	1.01
2000	2.47	8.10	0.99
2300	2.72	8.92	0.92
3000	3.24	10.63	0.80

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

Product Certifications:

Transline cables and connectors are certified to exceed the strict Verizon Wireless PIM [Passive Inter Modulation] and Motorola 25kW PIP [Peak Instantaneous Power] specifications.

Cable Specifications

50 Ohm Transline Cable 7/8"

Description	Product Number
Standard Cable	
7/8", Black Polyethylene Jacket	AT078J50
Fire Retardant Jacket	
7/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT078FX50
Riser Rated Cable	
7/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, UL-1666, CMR, IEC332-1, IEC332-3C	AT078R50
Physical Dimensions	
Center Dia., in (mm)	0.383 (9.73)
Dia. Over Dielectric, in (mm)	0.968 (24.58)
Dia. Over Outer Conductor, in (mm)	1.012 (25.70)
Max. Dia. Over Jacket, in (mm)	1.142 (29.01)
Center Conductor	Solid Copper Tube
Outer Conductor	Solid Aluminum Tube
Electrical Characteristics	
Maximum Frequency, GHz	5
Peak Power Rating, KW	90
DC Res, Ohms/1000 ft (1000m)	
Center	0.47 (1.54)
Outer	0.20 (0.64)
DC Breakdown, kV	6.7
Capacitance, pF/ft (m)	22.3 (73.16)
Inductance, mH/ft (m)	0.056 (0.184)
Jacket Spark, kV RMS	8
Typical VSWR	< 1.1
Impedance, Ohms	50
Velocity of Propagation	91%
Mechanical Characteristics	
Min. Bend. Rad., in (mm) – Single	5 (127)
Min. Bend. Rad., in (mm) – Multiple	10 (254)
Cable Weight, lb/ft (kg/m)	0.29 (0.43)
Bending Moment, ft.lb (N'm)	26 (35.1)
Tensile Strength, lb (kg)	734 (333.6)
Flat Plate Crush, lb/in (kg/mm)	132 (2.36)
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	dB/100m	
30	0.17	0.56	11.60
50	0.23	0.75	8.95
88	0.31	1.02	6.73
100	0.33	1.08	6.31
108	0.34	1.12	6.07
150	0.40	1.31	5.13
174	0.44	1.44	4.76
200	0.47	1.54	4.44
300	0.59	1.94	3.61
400	0.69	2.26	3.11
450	0.73	2.40	2.93
500	0.78	2.56	2.78
512	0.79	2.59	2.74
600	0.86	2.82	2.53
700	0.94	3.08	2.33
800	1.01	3.31	2.18
824	1.03	3.38	2.15
894	1.08	3.54	2.06
960	1.12	3.67	1.98
1000	1.15	3.77	1.94
1250	1.30	4.27	1.73
1500	1.45	4.76	1.57
1800	1.61	5.28	1.55
1900	1.67	5.48	1.53
2000	1.72	5.64	1.35
2300	1.87	6.14	1.25
3000	2.20	7.22	1.09

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

Product Certifications:

Transline cables and connectors are certified to exceed the strict Verizon Wireless PIM [Passive Inter Modulation] and Motorola 25kW PIP [Peak Instantaneous Power] specifications.

Cable Specifications

50 Ohm Transline Cable 1-1/4"

Description	Product Number
Standard Cable	
1-1/4", Black Polyethylene Jacket	AT114J50
Fire Retardant Jacket	
1-1/4", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT114FX50
Riser Rated Cable	
1-1/4", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, UL-1666, CMR, IEC332-1, IEC332-3C	AT114R50
Physical Dimensions	
Center Dia., in (mm)	0.590 (14.98)
Dia. Over Dielectric, in (mm)	1.480 (37.59)
Dia. Over Outer Conductor, in (mm)	1.524 (38.71)
Max. Dia. Over Jacket, in (mm)	1.654 (42.01)
Center Conductor	Solid Copper Tube
Outer Conductor	Solid Aluminum Tube
Electrical Characteristics	
Maximum Frequency, GHz	3.4
Peak Power Rating, KW	211
DC Res, Ohms/1000 ft (1000m)	
Center	0.30 (0.99)
Outer	0.12 (0.42)
DC Breakdown, kV	9
Capacitance, pF/ft (m)	22.3 (73.16)
Inductance, mH/ft (m)	0.056 (0.184)
Jacket Spark, kV RMS	8
Typical VSWR	< 1.1
Impedance, Ohms	50
Velocity of Propagation	91%
Mechanical Characteristics	
Min. Bend. Rad., in (mm) – Single	6 (152.4)
Min. Bend. Rad., in (mm) – Multiple	15 (381)
Cable Weight, lb/ft (kg/m)	0.53 (0.789)
Bending Moment, ft.lb (N'm)	50 (67.5)
Tensile Strength, lb (kg)	1124 (511)
Flat Plate Crush, lb/in (kg/mm)	122 (2.18)
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	0.12	0.39	29.57
50	0.16	0.52	22.18
88	0.22	0.72	16.13
100	0.24	0.79	14.78
108	0.25	0.82	14.19
150	0.29	0.95	12.24
174	0.32	1.05	11.09
200	0.34	1.12	10.44
300	0.43	1.41	8.25
400	0.51	1.67	6.96
450	0.54	1.77	6.57
500	0.58	1.90	6.12
512	0.59	1.94	6.01
600	0.64	2.10	5.54
700	0.70	2.30	5.07
800	0.76	2.49	4.67
824	0.77	2.53	4.61
894	0.81	2.66	4.38
960	0.85	2.79	4.17
1000	0.87	2.85	4.08
1250	0.99	3.25	3.58
1500	1.11	3.64	3.20
1800	1.25	4.10	2.87
1900	1.29	4.23	2.76
2000	1.33	4.36	2.67
2300	1.45	4.76	2.44
3000	1.84	6.04	1.93

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

Product Certifications:

Transline cables and connectors are certified to exceed the strict Verizon Wireless PIM [Passive Inter Modulation] and Motorola 25kW PIP [Peak Instantaneous Power] specifications.

Cable Specifications

50 Ohm Transline Cable 1-5/8"

Description	Product Number
Standard Cable	
1-5/8", Black Polyethylene Jacket	AT158J50
Fire Retardant Jacket	
1-5/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT158FX50
Riser Rated Cable	
1-5/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, UL-1666, CMR, IEC332-1, IEC332-3C	AT158R50
Physical Dimensions	
Center Dia., in (mm)	0.728 (18.49)
Dia. Over Dielectric, in (mm)	1.871 (47.52)
Dia. Over Outer Conductor, in (mm)	1.888 (47.96)
Max. Dia. Over Jacket, in (mm)	2.035 (51.69)
Center Conductor	Solid Copper Tube
Outer Conductor	Solid Aluminum Tube
Electrical Characteristics	
Maximum Frequency, GHz	3
Peak Power Rating, KW	315
DC Res, Ohms/1000 ft (1000m)	
Center	0.22 (0.72)
Outer	0.10 (0.33)
DC Breakdown, kV	11
Capacitance, pF/ft (m)	22.3 (73.16)
Inductance, mH/ft (m)	0.056 (0.184)
Jacket Spark, kV RMS	8
Typical VSWR	< 1.1
Impedance, Ohms	50
Velocity of Propagation	91%
Mechanical Characteristics	
Min. Bend. Rad., in (mm) – Single	8 (203)
Min. Bend. Rad., in (mm) – Multiple	20 (508)
Cable Weight, lb/ft (kg/m)	0.70 (1.037)
Bending Moment, ft.lb (N'm)	60 (81)
Tensile Strength, lb (kg)	1500 (682)
Flat Plate Crush, lb/in (kg/mm)	150 (2.68)
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	0.09	0.33	39.16
50	0.13	0.43	30.16
88	0.17	0.57	24.87
100	0.18	0.61	20.67
108	0.19	0.64	20.00
150	0.23	0.76	16.55
174	0.25	0.82	12.65
200	0.27	0.89	14.09
300	0.33	1.10	11.19
400	0.39	1.29	9.47
450	0.42	1.39	8.85
500	0.44	1.46	8.31
512	0.45	1.49	8.19
600	0.49	1.62	7.46
700	0.54	1.78	6.80
800	0.58	1.93	6.26
824	0.59	1.97	6.24
894	0.62	2.04	5.93
960	0.64	2.13	5.56
1000	0.67	2.20	5.46
1250	0.75	2.47	4.75
1500	0.85	2.80	4.23
1800	0.96	3.02	3.76
1900	0.99	3.26	3.62
2000	1.01	3.34	3.51
2300	1.10	3.61	3.20
3000	1.36	4.46	2.44

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

Product Certifications:

Transline cables and connectors are certified to exceed the strict Verizon Wireless PIM [Passive Inter Modulation] and Motorola 25kW PIP [Peak Instantaneous Power] specifications.

Cable Specifications

75 Ohm Transline Cable 1/2"

Description	Product Number
Standard Cable	
1/2", Black Polyethylene Jacket	AT012J75
Fire Retardant Jacket	
1/2", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT012FX75
1/2", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1, MSHA	AT012F75
Riser Rated Cable	
1/2", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, UL-1666, CMR, IEC332-1, IEC332-3C	AT012R75
Physical Dimensions	
Center Dia., in (mm)	0.123 (3.12)
Dia. Over Dielectric, in (mm)	0.470 (11.94)
Dia. Over Outer Conductor, in (mm)	0.510 (12.95)
Max. Dia. Over Jacket, in (mm)	0.652 (16.56)
Center Conductor	Copper-Clad Aluminum
Outer Conductor	Solid Aluminum
Electrical Characteristics	
Maximum Frequency, GHz	11
Peak Power Rating, KW	32
DC Res, Ohms/1000 ft (1000m)	
Center	1.09 (3.58)
Outer	0.46 (1.51)
DC Breakdown, kV	3.2
Capacitance, pF/ft (m)	14.9 (48.9)
Inductance, mH/ft (m)	0.082 (0.269)
Jacket Spark, kV RMS	8
Typical VSWR	1.3
Impedance, Ohms	75
Velocity of Propagation	93%
Mechanical Characteristics	
Min. Bend. Rad., in (mm) – Single	2 (50.8)
Min. Bend. Rad., in (mm) – Multiple	6 (152)
Cable Weight, lb/ft (kg/m)	0.10 (0.15)
Bending Moment, ft.lb (N'm)	7.5 (10.2)
Tensile Strength, lb (kg)	465 (211)
Flat Plate Crush, lb/in (kg/mm)	62 (1.11)
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		Avg. Pwr. kW
	dB/100 ft	dB/100m	
30	0.35	1.15	3.21
50	0.45	1.48	2.50
88	0.61	2.00	1.84
100	0.65	2.13	1.73
108	0.67	2.20	1.68
150	0.77	2.53	1.45
174	0.85	2.79	1.32
200	0.92	3.02	1.22
300	1.14	3.74	0.99
400	1.32	4.33	0.85
450	1.40	4.59	0.80
500	1.48	4.86	0.76
512	1.50	4.92	0.75
600	1.63	5.35	0.69
700	1.76	5.77	0.64
800	1.91	6.27	0.59
824	1.94	6.36	0.58
894	2.02	6.63	0.56
960	2.10	6.89	0.53
1000	2.15	7.05	0.52
1250	2.39	7.84	0.47
1500	2.60	8.53	0.43
1800	2.86	9.38	0.39
1900	2.94	9.65	0.38
2000	3.03	9.94	0.37
2300	3.26	10.70	0.34
3000	3.72	12.20	0.30

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



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



Cable Specifications

75 Ohm Transline Cable 7/8"

Description	Product Number
Standard Cable	
7/8", Black Polyethylene Jacket	AT078J75
Fire Retardant Jacket	
7/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, IEC332-1	AT078FX75
Riser Rated Cable	
7/8", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, UL-1666, CMR, IEC332-1, IEC332-3C	AT078R75
Physical Dimensions	
Center Dia., in (mm)	0.248 (6.30)
Dia. Over Dielectric, in (mm)	0.961 (24.41)
Dia. Over Outer Conductor, in (mm)	1.015 (25.78)
Max. Dia. Over Jacket, in (mm)	1.147 (29.13)
Center Conductor	Copper Clad Aluminum
Outer Conductor	Solid Aluminum Tube
Electrical Characteristics	
Maximum Frequency, GHz	6
Peak Power Rating, KW	68
DC Res, Ohms/1000 ft (1000m)	
Center	0.26 (0.85)
Outer	0.15 (0.49)
DC Breakdown, kV	6.4
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	8 (203)
Min. Bend. Rad., in (mm) – Multiple	10 (254)
Cable Weight, lb/ft (kg/m)	0.35 (0.47)
Bending Moment, ft.lb (N'm)	35 (47.5)
Tensile Strength, lb (kg)	830 (377)
Flat Plate Crush, lb/in (kg/mm)	132 (2.36)
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
	dB/100 ft	dB/100m	
30	0.18	0.59	9.46
50	0.23	0.75	7.41
88	0.30	0.98	5.68
100	0.32	1.05	5.32
108	0.34	1.12	5.01
150	0.40	1.31	4.51
174	0.43	1.41	3.96
200	0.46	1.51	3.70
300	0.60	1.97	2.84
400	0.70	2.30	2.43
450	0.74	2.43	2.30
500	0.78	2.56	2.18
512	0.79	2.59	2.16
600	0.87	2.85	1.96
700	0.94	3.08	1.81
800	1.02	3.35	1.67
824	1.04	3.41	1.64
894	1.08	3.54	1.58
960	1.13	3.71	1.51
1000	1.16	3.81	1.49
1250	1.30	4.26	1.31
1500	1.45	4.76	1.17
1800	1.62	5.31	1.06
1900	1.68	5.51	1.02
2000	1.74	5.71	0.98
2300	1.89	6.20	0.90
3000	2.16	7.09	0.79

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

