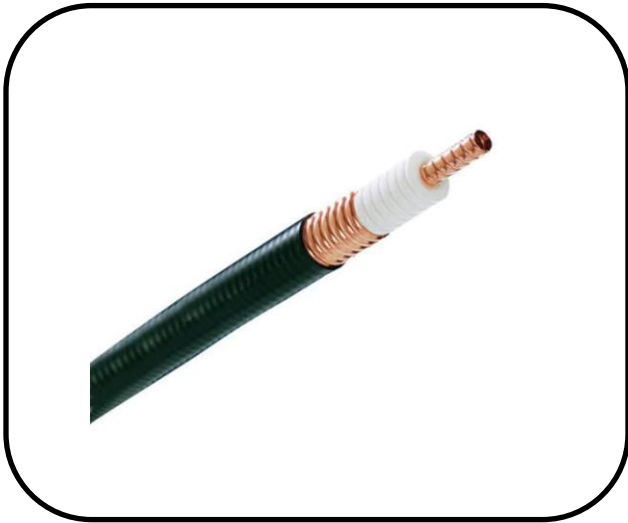


AAT-158-FC: 1-5/8" 50 ohm Coaxial Cable



Features

- Ultra Low Attenuation
- Copper Shield
- Low VSWR
- Wide Frequency Range
- Excellent Power Rating
- UV Resistant
- Gas Block or Gas Pass

Materials and Dimensions

<i>Inner Conductor-helical corrugated copper</i>	17.7 mm 0.697 in
<i>Dielectric –foam PE</i>	42.6 mm 1.677 in
<i>Outer conductor – Corrugated copper tube</i>	46.4 mm 1.827 in
<i>Diameter over outer jacket – Polyethylene, Black</i>	50.0 mm 1.969 in

Mechanical Specifications

<i>Cable Weight</i>	1.06 kg/m 0.712 lb/ft
<i>Tensile Strength</i>	2400 N 539 lbs.
<i>Min. Bending Radius (single)</i>	300 mm 11.8 in
<i>Min. Bending Radius (repeated)</i>	500 mm 19.6 in
<i>Number of bends, minimum (typical)</i>	15 (50)
<i>Recommended Hanger Spacing</i>	1.2 m 4 ft

Environmental Specifications

<i>Installation Temperature</i>	-25°C to +60°C
<i>Operating Temperature</i>	-40°C to +85°C
<i>Storage Temperature</i>	-70°C to +85°C
<i>2002/95/EC (RoHS)</i>	<i>compliant</i>

Return Loss & VSWR

1 to 1000 MHz	Return Loss: ≤ -26dB VSWR: ≤ 1.105:1
1000 to 2500 MHz	Return Loss: ≤ -24dB VSWR: ≤ 1.140:1

Electrical Specifications

<i>Impedance</i>	50 ± 1 Ω
<i>Relative Velocity of Propagation</i>	90%
<i>Capacitance (1 kHz)</i>	75 ± 1.5 pF/m
<i>Maximum Operating Frequency</i>	2.5 GHz
<i>Cut-off Frequency</i>	2.68 GHz
<i>Peak Power Rating</i>	306 kW
<i>Insulation Resistance</i>	≥ 10 GΩ x km
<i>Operating Voltage</i>	5400 Vrms
<i>DC Breakdown Voltage</i>	15000 V
<i>Jacket Spark Test Voltage</i>	11000 Vrms
<i>Inner Conductor DC-resistance</i>	≤ 1.42 Ω/km
<i>Outer Conductor DC-resistance</i>	≤ 0.65 Ω/km

Attenuation

<i>Frequency (MHz)</i>	<i>Attenuation (dB/100m)</i>	<i>Average Power (kW)</i>
1	0.06	182.21
80	0.59	16.21
100	0.63	17.49
150	0.83	11.61
450	1.47	6.37
850	2.06	4.51
900	2.16	4.29
1000	2.28	4.03
1800	3.17	2.85
2000	3.37	2.67
2200	3.58	2.52
2500	3.83	2.32

Standard Conditions

<i>Attenuation, Ambient Temperature</i>	20°C
<i>Average Power, Ambient Temperature</i>	40°C
<i>Average Power, Inner Conductor Temperature</i>	100°C

Ordering Information

<i>Part Number</i>	<i>Description</i>	<i>UOM</i>
AAT-158-FC	1-5/8" 50 ohm Coaxial Cable	Per Ft.

Disclaimer: Specifications are subject to change without notice. Information may be changed or updated without notice. American Amplifier Technologies™ may also make improvements and/or changes in the products and/or pricing described at any time without notice.