

## AAF-14-ST

### 1/4" Standard Cable



Electrical Characteristics												
Impedance	50Ω ± 1Ω											
Max Operating Frequency	15.8 GHz											
Cut-off Frequency	19 GHz											
Relative Velocity of Propagation	82%											
Capacitance (1 kHz)	80 nF/km (24.4nF/1000ft)											
Maximum Operating Power	13 kW											
Test voltage (Jacket)	2000 V											
HF-operating voltage (peak)	≤ 900 V											
Resistance	Inner Conductor	≤ 5.95 Ω/km (1.82 Ω/1000ft)										
	Outer Conductor	≤ 3.5 Ω/km (1.07 Ω/1000ft)										
	Insulation	≥ 10 GΩ·km (32.8 GΩ·1000ft)										
Return Loss / VSWR (typical)	700-1000 MHz	23 dB / 1.15										
	1700-2700 MHz	23 dB / 1.15										
Screening attenuation	≥ 120 dB											
Passive intermodulation	≥ 160 dBc											
Inductance	0.195 μH/m (0.059 μH/ft)											
Frequency (MHz)	100	450	800	900	1000	1800	1900	2200	2500	2700	3000	
Attenuation (typical)	at 100 m	4.2 dB	9.2 dB	12.4 dB	6.7 dB	7.2 dB	9.9 dB	10.3 dB	11.2 dB	12 dB	12.6 dB	13.2 dB
	at 100 ft	1.3 dB	2.8 dB	3.8 dB	4.0 dB	4.3 dB	5.9 dB	6.0 dB	6.5 dB	7.0 dB	7.3 dB	7.9 dB
Mean Power at 40° C	1.8 kW	0.82 kW	0.61 kW	0.57 kW	0.54 kW	0.39 kW	0.38 kW	0.35 kW	0.33 kW	0.31 kW	0.29 kW	
Value of typical gradient 10%												
Mechanical and Environmental Characteristics												
Minimum Bend Radius	repeated 12 x ø, single 4 x ø											
Minimum Number of Bends	15, (50 typical)											
Bending Moment	0.6 N·m											
Tensile Strength	≤ 600 N											
Cable Weight (approx.)	112.2 kg/km (247.3 lb/1000 ft)											
Flat Plate Crush Strength	18 N/mm											
Operating Temperature	-55° C to +85° C (-67° F to +185° F)											
Installation Temperature	-40° C to +60° C (-40° F to +140° F)											
Construction	Material										Diameter	
Inner Conductor	Plain copper - clad aluminium wire										2.38 mm	
Dielectric	Foamed Polyethylene (PE)										6.4 mm	
Outer Conductor	Copper-Tape, Longitudinal Welded Annular Corrugation										7.5 mm ± 0.2 mm	
Jacket	Thermoplastic copolymer, BK (wall thickness approx. 0.6 mm)										8.8 mm ± 0.15 mm	

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.