

RF FEEDER CABLE 1/2 ALUMINIUM (1/2"AL)

SIZE (1/2"AL)

ETL-RF-CABLE-001



CONSTRUCTION MATERIALS

Inner Conductor	Copper-Clad Aluminum Wire
Dielectric	Physical Foam Polyethylene
Outer Conductor	Corrugated Aluminum Tube
Jacket	Black PE

PHYSICAL DIMENSIONS

Inner Conductor Diameter	4.80 mm
Dielectric Diameter	12.20 mm
Outer Conductor Diameter	13.90 mm
Diameter Over Jacket	15.70 mm

MECHANICAL SPECIFICATIONS

Minimum Bending Radius	
Single Bending	50 mm
Repeated Bending	125 mm
Minimum Number of Bends	15
Tensile Strength	1000 N

ELECTRICAL SPECIFICATION

Capacitance	76.0 pF/m(23.3 pF/ft)
Impedance	50±1 Ω
Velocity	86%
RF Peak Voltage	1.60 KV
Peak Power Rating	36 KW
Cut-off Frequency	8.8 GHz
Shielding Effectiveness>10MHz	>120 dB
Insulation Resistance	5000 MΩ•km
VSWR	
0.8~1.0 GHz	≤1.15
1.7~2.2 GHz	≤1.15
2.2~2.7 GHz	≤1.15
3.3~3.8 GHz	≤1.20

ENVIRONMENTAL SPECIFICATION

Storage Temperature	-55 °C ~ +85 °C
Installation Temperature	-40 °C ~ +60 °C
Operating Temperature	-55 °C ~ +85 °C

PERFORMANCE

Frequency MHz	Attenuation dB/100 m	Attenuation dB/100 ft	Average Power Rating (kW)
100	2.40	0.73	3.58
200	3.45	1.05	2.50
450	5.25	1.60	1.64
800	7.15	2.18	1.21
900	7.65	2.33	1.14
1000	8.10	2.47	1.07
1500	10.10	3.08	0.86
1800	11.15	3.40	0.78
2000	11.85	3.61	0.74
2200	12.50	3.81	0.70
2400	13.05	3.98	0.68
2500	13.40	4.08	0.66
3000	14.80	4.51	0.59
3300	15.75	4.80	0.55
3600	16.56	5.05	0.53
4000	17.61	5.37	0.50

Standard Conditions :

For attenuation : VSWR 1.0 , cable 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 .

Maximum attenuation value shall be 105% off the nominal attenuation value.