FLEXIBLE RF CABLE

HCAAY-50-12 (1/2")

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

PHYSICAL DIMENSIONS	
Inner Conductor Diameter	4.80 mm
Dielectric Diameter	12.30 mm
Outer Conductor Diameter	13.80 mm
Diameter Over Jacket	15.70 mm

MECHANICAL SPECIFICATIONS

Minimum Bending Radius	
Single Bending	80 mm
Repeated Bending	125 mm
Minimum Number of Bends	15
Tensile Strength	800 N

ELECTRICAL SPECIFICATION

Capacitance	76.0 pF/m
Impedance	50±2 Ω
Velocity	86%
RF Peak Voltage	1.60 KV
Peak Power Rating	40 KW
Cut-off Frequency	8.8 GHz
Shielding Effectiveness >10MHz	>120 dB
Insulation Resistance	5000 MΩ•km
VSWR	
0.8~1.0 GHz	≤1.20
1.7~2.2 GHz	≤1.20
2.2~2.7 GHz	≤1.20

ENVIRONMENTAL SPECIFICATION

Storage Temperature	-55 ℃ ~ +85 ℃
Installation Temperature	-40 ℃ ~ +60 ℃
Operation Temperature	-55 ℃ ~ +85 ℃

PERFORMANCE

Frequency	Attenuation		Average Power
MHz	dB/100 m	dB/100 ft	Rating（kW）
100	2.17	0.66	3.94
150	2.67	0.81	3.17
200	3.10	0.94	2.75
280	3.69	1.12	2.27
450	4.74	1.44	1.80
800	6.45	1.97	1.33
900	6.87	2.09	1.25
1000	7.28	2.22	1.18
1500	9.08	2.77	0.95
1800	10.05	3.06	0.86
2000	10.66	3.25	0.81
2200	11.24	3.43	0.77
2400	11.80	3.60	0.75
2500	12.08	3.68	0.73
3000	13.39	4.08	0.65

Standard Conditions：

For attenuation： VSWR 1.0， cable temperature 20 ℃(68 ℉)

For average power： VSWR 1.0， ambient temperature 40 ℃(104 ℉)，

Inner conductor temperature 100 ℃(212 ℉)。No solar loading。

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