

FLEXIBLE ALUMINUM CABLE

ETL HHTAYZ-50-42 (1-5/8"L)



CONSTRUCTION MATERIALS

Inner Conductor	Helical Copper Tube
Dielectric	Physical Foam Polyethylene
Outer Conductor	Corrugated Aluminum Tube
Jacket	Black PE

PHYSICAL DIMENSIONS

Inner Conductor Diameter	17.40 mm
Dielectric Diameter	42.80 mm
Outer Conductor Diameter	46.50 mm
Diameter Over Jacket	49.50 mm

MECHANICAL SPECIFICATIONS

Minimum Bending Radius	
Single Bending	200 mm
Repeated Bending	510 mm
Minimum Number of Bends	15
Tensile Strength	3000 N

ELECTRICAL SPECIFICATION

Capacitance	76.0 pF/m
Impedance	50±1 Ω
Velocity	88%
RF Peak Voltage	5.70 KV
Peak Power Rating	290 KW
Cut-off Frequency	2.80 GHz
Shielding Effectiveness>10MHz	>120 dB
Insulation Resistance	5000 MΩ·km
VSWR	
0.8~1.0 GHz	≤ 1.15
1.7~2.7 GHz	≤ 1.15

ENVIRONMENTAL SPECIFICATION

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

PERFORMANCE

Frequency	Attenuation		Average Power Rating (kW)
MHz	dB/100 m	dB/100 ft	
100	0.76	0.23	15.55
200	1.09	0.33	10.27
450	1.72	0.52	6.46
800	2.40	0.73	4.62
900	2.58	0.79	4.30
1000	2.74	0.84	4.05
1500	3.50	1.07	3.17
1800	3.94	1.20	2.83
2000	4.20	1.28	2.65
2200	4.46	1.36	2.49
2400	4.74	1.44	2.34
2500	4.86	1.48	2.28

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.

