

LOW LOSS RF CABLE HCTAY-50-23 (7/8" A)



CONSTRUCTION MATERIALS	
Inner Conductor	Smooth Copper Tube
Dielectric	Physical Foam Polyethylene
Outer Conductor	Corrugated Copper Tube
Jacket	Black PE

PHYSICAL DIMENSIONS	
Inner Conductor Diameter	9.30 mm
Dielectric Diameter	22.80 mm
Outer Conductor Diameter	25.40 mm
Diameter Over Jacket	27.80 mm

MECHANICAL SPECIFICATIONS

Minimum Bending Radius	
Single Bending	90 mm
Repeated Bending	250 mm
Minimum Number of Bends	15
Tensile Strength	1590 N

ELECTRICAL SPECIFICATION

Capacitance	74.0 pF/m	
Impedance	50±1 Ω	
Velocity	90%	
RF Peak Voltage	3.00 KV	
Peak Power Rating	91 KW	
Cut-off Frequency	5.00 GHz	
Shielding Effectiveness >10MHz	>120 dB	
Insulation Resistance	5000 MΩ·km	
	VSWR	Return loss(dB)
680~800 MHz	≤1.13	24.3
800~960 MHz	≤1.13	24.3
1700~2200 MHz	≤1.13	24.3
2300~2700 MHz	≤1.15	23.1
2700~4000 MHz	≤1.20	20.8

ENVIRONMENTAL SPECIFICATION

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

PERFORMANCE

Frequency MHz	Attenuation		Average Power Rating (kW)
	dB/100 m	dB/100 ft	
100	1.16	0.35	7.49
150	1.43	0.44	6.05
200	1.66	0.51	5.21
280	1.99	0.61	4.33
450	2.56	0.78	3.39
700	3.24	0.99	2.68
800	3.47	1.06	2.48
900	3.70	1.13	2.32
1000	3.92	1.19	2.19
1500	4.99	1.52	1.74
1800	5.44	1.66	1.53
2000	5.77	1.76	1.48
2100	5.93	1.81	1.44
2200	6.09	1.86	1.42
2300	6.25	1.91	1.38
2500	6.55	2.00	1.26
2600	6.67	2.03	1.24
3000	7.27	2.22	1.17
3400	7.82	2.38	1.09
3500	8.01	2.44	1.06
3700	8.21	2.50	1.04
4000	8.60	2.62	0.99
5000	9.80	2.99	0.87

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.