

# FLEXIBLE RF CABLE

## HCTAY-50-22 (7/8")



### CONSTRUCTION MATERIALS

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

### PHYSICAL DIMENSIONS

Inner Conductor Diameter	9.00 mm
Dielectric Diameter	22.30 mm
Outer Conductor Diameter	24.90 mm
Diameter Over Jacket	27.50 mm

### MECHANICAL SPECIFICATIONS

Minimum Bending Radius	
Single Bending	90 mm
Repeated Bending	250 mm
Minimum Number of Bends	15
Tensile Strength	1470 N(325 lb)

### ENVIRONMENTAL SPECIFICATION

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

### ELECTRICAL SPECIFICATION

Capacitance	75.0 pF/m(22.9 pF/ft)
Impedance	50±1 Ω
Velocity	89%
RF Peak Voltage	3.00 kV
Peak Power Rating	91 kW
Cut-off Frequency	5.20 GHz
Shielding Effectiveness >10MHz	>120 dB
Insulation Resistance	10000MΩ·km
VSWR	
0.8~1.0 GHz	≤ 1.10
1.7~2.2 GHz	≤ 1.13
2.2~2.7 GHz	≤ 1.15

### PERFORMANCE

Frequency MHz	Attenuation		Average Power Rating (kW)
	dB/100 m	dB/100 ft	
100	1.19	0.36	8.62
150	1.47	0.45	7.20
200	1.71	0.52	5.99
280	2.05	0.62	4.94
450	2.64	0.80	3.88
800	3.62	1.10	2.83
900	3.87	1.18	2.65
1000	4.10	1.25	2.50
1500	5.16	1.57	1.99
1800	5.73	1.75	1.79
2000	6.09	1.86	1.68
2200	6.44	1.96	1.59
2400	6.78	2.07	1.54
2500	6.95	2.12	1.50
3000	7.74	2.36	1.33

#### 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.