

1/4" Flexible Annular Corrugated Coax Cable

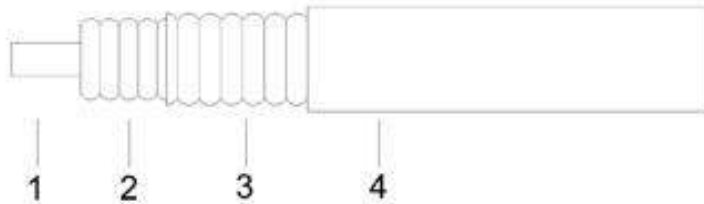
HCTAY(Z)-50-6(1/4")

► Overview

50 ohm RF cable with foam degree of about 80% of the ultra-high foam polyethylene, low attenuation, the temperature coefficient is small, the temperature changes have a good stability. It is mainly used as a low loss, low VSWR signal transmission line in wireless base stations such as mobile communication, antenna feeder, microwave transmission, broadcasting communication and other systems base stations, and the connection between receiver and antenna or other high frequency fields.



► Construction



Item	Material	Diameter (mm)
1.Inner conductor	Copper Clad Aluminum	2.4±0.1
2.Dielectric	Physical Foam Polyethylene	6.0±0.1
3.Outer conductor	Corrugated Copper Tube	7.5±0.1
4.Jacket	Black PE	9.1±0.5

► Electrical Characteristics

1.Capacitance (pF/m)	76
2.Impedance (Ω)	50
3.Velocity (%)	88
4.Peak Power Rating (kW)	11
5.RF Peak Voltage (kV)	0.83
6.Insulation Resistance (MΩ.km)	>5000
7.Cut-off Frequency (GHz)	18.6
8.Insulation Voltage (kVrms)	2.2
9.Jacket Spark (kVrms)	3.0
10.Sheilding Effectiveness (dB)	>120

► **Mechanical and Environmental Characteristics**

Min. Single Bending Radius (mm)	38
Min. Repeated Bending Radius (mm)	76
No. of Bends	15
Mobile Apply (mm)	200
Bending Moment (N.m)	1.3
Tensile Strength (kg)	53
Storage Temp (°C)	-55 to +85
Installation Temp (°C)	-40 to +60
Operating Temp (°C)	-55 to +85
VSWR≤(Return loss≥dB)	
0.005-3GHz	1.15 (23)
0.8-1.0GHz	1.10 (26)
1.7-2.0GHz	1.10 (26)
2.0-2.4GHz	1.10 (26)

► **Attenuation (VSWR1.0, cable temp. 20°C) & Average Power (VSWR 1.0, ambient temp. 40°C)**

Frequency (MHz)	Attenuation (dB/100m)	Average Power (kW)
100	4.25	1.87
200	6.10	1.30
450	9.37	0.85
800	12.72	0.62
900	13.55	0.58
1000	14.35	0.55
1500	17.80	0.44
1800	19.70	0.40
2000	20.80	0.37
2200	21.90	0.35
2400	23.00	0.34
2500	23.60	0.34
3000	26.10	0.30