

1/4" Super Flexible RF Coaxial Cable



Part No.	HCAHY(Z)-50-5	
Material and dimensions		
Impedance (Ohm)	Copper Clad Aluminum wire	Ø 1.90±0.03 mm
Inner conductor	Foam PE	Ø 4.85±0.15 mm
Outer conductor	Helical corrugated copper tube	Ø 6.40±0.15mm
Jacket	PE Black or FNRC	Ø 7.50 ±0.15mm
Electrical Specifications		
Impedance	50 ± 1 Ω	
Relative Velocity of Propagation	81%	
Capacitance	83 pF/m	
Maximum Operating Frequency	20.4 GHz	
Peak Power Rating	6.4kW	
Insulation Resistance	> 5000 M Ω .km	
DC Breakdown Voltage	2000V	
Jacket Spark Test Voltage	5000 Vrms	
Inner Conductor DC-resistance	≤10.20 Ω /km	
Outer Conductor DC-resistance	≤7.25 Ω /km	
Shielding Attenuation	≥120dB	
Environmental Specifications		
	PE	FRNC
Installation Temperature	-40°C to +60°C	-20°C to +60°C
Operating Temperature	-55°C to +85°C	-30°C to +80°C
Storage Temperature	-70°C to +85°C	-30°C to +80°C
Mechanical Specifications		
Cable weight PE	≈65 kg/km	
Cable weight FRNC	≈75 kg/km	
Tensile strength	600 N	

Min. bending radius (single)	13 mm	
Min. bending radius (repeated)	25 mm	
Bending moment	1.5 Nm	
Flat plate crush strength	15 N/mm	
Standard Conditions		
Attenuation, VSWR 1.0 Ambient Temperature	20°C	
Average Power, VSWR 1.0 Ambient Temperature	40°C	
Average Power, Inner Conductor Temperature	100°C	
PIM	≤-160dBc	
VSWR	800MHz -1000MHz≤1.10 1700MHz -2200MHz≤1.13 2200MHz - 4000MHz≤1.15	
Attenuation		
Frequency (MHz)	Attenuation (dB/100m)	Average Power (KW)
100	5.95	1.15
200	8.36	0.83
300	10.34	0.70
400	12.47	1.70
450	13.15	0.55
800	17.52	0.40
900	18.56	0.37
1000	19.60	0.35
1800	26.93	0.24
2000	28.57	0.23
2200	30.24	0.22
2500	32.35	0.21
2700	33.71	0.20
3000	35.78	0.19
3500	39.10	0.17
3800	40.96	0.16
4000	42.21	0.16

* Maximum attenuation value shall be 105% of the nominal attenuation value .



Regulatory compliance/Certifications.	
RoHs 2011/65/EU	Compliance
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2006	Below Maximum Concentration Value (MCV)
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
Fire	IEC 60754-1、-2; IEC 60332-1、-2; IEC 61034-1、-2; IEC 60332-3-24.