

1/2” Super Flexible RF Coaxial Cable



Part No.	HCAA(Y/Z)-50-12	
Material and dimensions		
Inner conductor	Copper Clad Aluminum wire	Ø 3.58±0.03 mm
Insulation	Foam PE	Ø 9.30±0.20 mm
Outer conductor	Helical corrugated copper tube	Ø 12.0±0.20mm
Jacket	PE Black or FRNC	Ø13.4 ±0.20mm
Electrical Specifications		
Impedance	50 ± 1 Ω	
Relative Velocity of Propagation	81%	
Capacitance	83 pF/m	
Maximum Operating Frequency	10.2 GHz	
Peak Power Rating	15.6kW	
Insulation Resistance	> 10000 M Ω .km	
DC Breakdown Voltage	2500V	
Jacket Spark Test Voltage	5000 Vrms	
Inner Conductor DC-resistance	≤2.97 Ω /km	
Outer Conductor DC-resistance	≤6.30 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	≈130 kg/km	
Cable weight FRNC	≈140 kg/km	
Tensile strength	750 N	
Min. bending radius (single)	25 mm	

Min. bending radius (repeated)	55 mm	
Bending moment	3 Nm	
Flat plate crush strength	12 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	3.31	3.16
200	4.84	2.17
300	6.07	1.71
400	7.11	1.47
450	7.59	1.38
800	10.42	1.01
900	11.21	0.95
1000	11.82	0.89
1800	16.01	0.63
2000	17.22	0.60
2200	18.21	0.56
2500	19.62	0.53
2700	20.74	0.50
3000	22.31	0.46
3500	23.98	0.44
3800	24.83	0.42
4000	25.38	0.41

* 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.