

# DATA SHEET



RF Cable

HCAAY(YZ)-50-12(1/2")



## Description

Standard cable	
1/2" PE jacket	HCAAY-50-12
Fire retardant cable	
1/2" Fire retardant jacket	HCAAYZ-50-12

Return Loss	87-108MHz	≤-26dB
	470-862MHz	≤-26dB
	1700MHz-1900MHz	≤-24dB
	1900MHz-2200MHz	≤-24dB
	2200MHz-2500MHz	≤-24dB

## Mechanical Performance

Inner conductor	CCA	4.80±0.05mm
Dielectric	Foamed PE	nom. 12.2mm
Outer conductor	Annular Corrugated Cu tube	13.8±0.15mm
Outer Jacket	PE	15.9±0.20mm
	FRNC	15.9±0.20mm
Min. Bending Radius(single)		70mm
Min. Bending Radius(multiple)		125mm
Number of bends(minimum)		15
Tensile strength		1150N
Operating temperature	PE	-55°C ~ +85°C
	FRNC	-40°C ~ +85°C
Installation temperature	PE	-40°C ~ +65°C
	FRNC	-25°C ~ +60°C
Storage Temperature	PE	-70°C ~ +85°C
	FRNC	-40°C ~ +85°C

## Attenuation and Average Power

Frequency (MHz)	Attenuation (dB/100m)	Average Power (kw)
450	4.820	1.530
800	6.590	1.170
900	7.030	1.050
1000	7.420	1.020
1800	10.400	0.723
2000	11.010	0.673
2200	11.420	0.615
2400	12.090	0.608
3000	13.620	0.563
4000	16.110	0.479
6000	20.500	0.378
8000	24.270	0.318

## Electrical Performance

Impedance	50±1Ω
Cutoff Frequency	8.8GHz
Velocity of Propagation	88%
Peak Power	40kW
Insulation resistance	>5000MΩ·km
Dielectric strength	4000V
Capacitance	76pF/m
Inductnce	0.19μH/m
DC resistance inner conductor	1.60Ω/km
DC resistance outer conductor	2.68Ω/km
Intermodulation (IM3, 2 x 20 W)	≤ -155 dBc
	@ 910MHz and 1800MHz (static & dynamic)

## Standard Conditions:

Typical attenuation at sea level with 20°C, maximum value shall be 105% of the nominal attenuation value / Power rate at 40°C

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Tianjin Zhonghuan Ascend Technologies Co.Ltd.  
No.71 Taihua Road, Economic-technical Development Zone,  
Tianjin, P.R.China  
P.C.: 300457

TEL:+86-022-59886766  
FAX:+86-022-25322909  
E-MAIL:[ascend@china-ascend.com](mailto:ascend@china-ascend.com)

Page  
1/1