

# DATA SHEET



RF Cable

1/2" AL & 1/2" AL FR



## Description

Standard cable	
1/2" aluminum cable with PE jacket	1/2" AL
1/2" aluminum cable with FR jacket	1/2" AL FR

## Dimension

Inner conductor	CCA	4.8 ± 0.1mm
Dielectric	Foamed PE	nom. 12.2mm
Outer conductor	Annular Corrugated Al tube	13.75±0.15mm
	Thickness	nom. 0.35mm
Outer Jacket	PE	16.0±0.3mm
	FR	16.0±0.3mm

## Mechanical Specification

Min. Bending Radius(single)	70mm
Min. Bending Radius(multiple)	160mm
Number of bends(minimum)	15
Adhesive strength between inner conductor and insulation	50kgf/m

## Environmental Specification

Operating temperature	PE	-55°C ~ +85°C
	FR	-25°C ~ +70°C
Installation temperature	PE	-40°C ~ +60°C
	FR	-20°C ~ +60°C
Storage Temperature	PE	-70°C ~ +85°C
	FR	-25°C ~ +70°C

## Electrical Performance

Impedance	50±1Ω	
Cutoff Frequency	10GHz	
Velocity of Propagation	87%	
Peak Power	25kW	
Insulation resistance	>1000MΩ·km	
Dielectric strength	4000V	
DC resistance	inner conductor	1.80Ω/km
	outer conductor	2.50Ω/km
Intermodulation (IM3, 2 x 20 W)	≤ -155 dBc	

## VSWR

30-2700MHz	≤1.15
3000-3900MHz	≤1.20

## Attenuation

Frequency (MHz)	Max. Attenuation (dB/100m)
30	1.45
50	1.80
100	2.60
200	3.60
300	4.50
400	5.20
500	5.80
800	7.50
1000	8.40
1500	10.40
1800	11.50
2000	12.10
2400	13.40
2700	14.30
3600	17.79
3900	18.61

## Standard Conditions:

Attenuation: VSWR 1.0, 20°C ambient temperature

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

Page  
1/1