

1/2" Plenum Al



1 Product Structure

	Designation	Material	Diameter (mm)
1	Inner Conductor	Copper clad Aluminum	4.80±0.05
2	Dielectric	PE spline	Nom. 11.70
3	Outer Conductor	Corrugated Aluminum	13.85±0.25
4	Jacket	White PVC	15.70±0.30

2 Electrical Specifications

Impedance	50 ± 2 Ohm
Operating Frequency	1- 6000 MHz
Insulation Resistivity (MΩ .km at 20 °C)	≥100000
Dielectric Strength (1 minute, V DC)	4000 (No Crack)
Inductance (μ H/m)	0.19
Jacket Spark Test Voltage (kV)	5
Relative Propagation Velocity (Typical)	88%
Peak Power (kW)	40
	0.70~0.894 GHz≤1.20 (-20.8dB)
	0.806GHz~0.96 GHz≤1.20 (-20.8dB)
Return Loss (VSWR)	1.7GHz~2.7 GHz≤1.20 (-20.8dB)
	3.3GHz~4.2GHz≤1.25(-19.1dB)
	5.7G ~5.9GHz≤1.36(-16.3dB)

3 Attenuation and Average Power

Frequency (MHz)	Attenuation (dB/100m)	Average Power(KW)
450 MHz	5.134	1.49
700 MHz	6.583	1.16
800 MHz	7.105	1.07
894 MHz	7.574	1.01
960 MHz	7.892	0.97
1000 MHz	8.081	0.94
1500 MHz	10.256	0.74
1800 MHz	11.439	0.67
2000 MHz	12.192	0.63
2200 MHz	12.92	0.59
2500 MHz	13.975	0.55

2700 MHz	14.656	0.52
3000 MHz	15.649	0.49
3400 MHz	16.928	0.45
3800 MHz	18.164	0.42
4000 MHz	18.768	0.41
5000 MHz	21.671	0.35
6000 MHz	24.420	0.31

4 Mechanical Specifications

Min Bend Radius, Multiple Bends	127 mm
Min Bend Radius, Single Bend	63.5 mm
Jacket Flame retardant rating(ETL)	CMP
Max Tensile Force	79 kg
Flat Plate Crush Resistance	1.429kg/mm

5 Environment Specifications

Installation Temperature	-5 ~ 60°C
Storage Temperature	-20 ~ 80°C
Operation Temperature	-20 ~ 80°C