

CFS1000

Flexible, Ultra Low-Loss, High Power
Phase & Amplitude Stable Coaxial Cable



Structure & Dimension

	Structure	Dimension (mm)	Material
1	Inner Conductor	3.00	Silver Plated Copper
2	Insulating	8.24	LD-PTFE
3	Outer Conductor	8.48	Silver Plated Copper Ribbon
4	Shielding	9.20	Silver Plated Copper
5	Jacket	10.00	PFA

Specification

1	Operating Frequency (GHz)	13.5
2	Impedance (Ohms)	50
3	Phase Stability	$\leq \pm 2^\circ$ @ 10 GHz
4	Phase Stability (Temperature)	< 750 PPM @ $-55^\circ\text{C} \sim +85^\circ\text{C}$
5	Amplitude Stability	$\leq \pm 0.1$ dB @ 13.5 GHz
6	Velocity of Propagation	83%
7	Voltage Withstand (V,DC)	2900
8	Shielding Effectiveness (dB)	> 90
9	Weight (g/m)	200
10	Single Bend Radius (mm)	40.00
11	Repeated Bend Radius (mm)	100.00
12	Temperature Range ($^\circ\text{C}$)	$-55 \sim +85$

Attenuation VS. Frequency

Frequency (MHz)	100	300	500	1000	2400	3000	6000	8000	10000	12400	13500		
Attenuation (dB/m)	0.037	0.064	0.083	0.120	0.190	0.215	0.314	0.369	0.419	0.474	0.498		
Average Power (KW)	6.956	3.967	3.052	2.125	1.335	1.183	0.808	0.688	0.606	0.535	0.510		