

CFS150U

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



Structure & Dimension

	Structure	Dimension (mm)	Material
1	Inner Conductor	0.31	Silver Plated Copper
2	Insulating	0.88	LD-PTFE
3	Outer Conductor	1.00	Silver Plated Copper Ribbon
4	Shielding	1.23	Silver Plated Copper
5	Jacket	1.50	FEP

Specification

1	Operating Frequency (GHz)	110
2	Impedance (Ohms)	50
3	Phase Stability	$\leq \pm 2^\circ$ @ 10 GHz ; $\leq \pm 3^\circ$ @ 18 GHz
4	Phase Stability (Temperature)	≤ 800 PPM @ $-45^\circ\text{C} \sim +85^\circ\text{C}$
5	Amplitude Stability	$\leq \pm 0.1$ dB @ 18 GHz
6	Velocity of Propagation	82%
7	Time Delay (ns/m)	500
8	Capacitance (pF/m)	> 90
9	Shielding Effectiveness (dB)	6.0
10	Weight (g/m)	6.00
11	Minimum Bend Radius (mm)	14.50
12	Temperature Range ($^\circ\text{C}$)	$-55 \sim +125$

Attenuation VS. Frequency

Frequency (MHz)	1000	3000	6000	10000	12400	18000	26500	40000	50000	67000	80000	90000	110000
Attenuation (dB/m)	1.137	1.985	2.823	3.680	4.113	4.993	6.115	7.604	8.566	10.027	11.034	11.772	13.143
Average Power (KW)	0.178	0.102	0.072	0.055	0.049	0.041	0.033	0.027	0.024	0.020	0.018	0.017	0.015