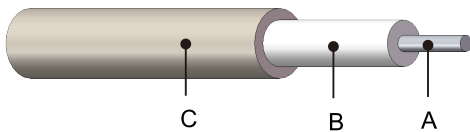


Semi-Rigid Coax Cables

Phase Stable
65 GHz | 78% VP

LINCOS designed Semi-Rigid Coax Cables is suitable for transmitting high-frequency signals in mobile communication, quantum computer, radar and other systems. The insulation of the semi steel stable phase coaxial RF cable is wrapped with low-density PTFE, and the outer conductor is made of copper alloy. Its structure has excellent phase stability and shielding characteristics, with lower attenuation in the same size, while supporting operation in extremely low temperature environments.

Figure 7: Cable Construction



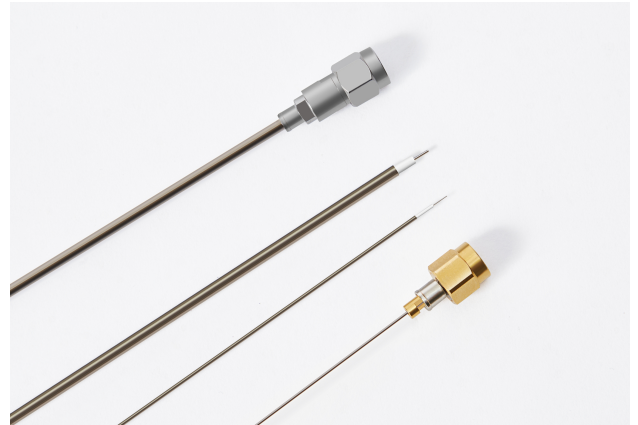
Cable Construction

Item	Construction	Material
A	Conductor	Silver plated copper alloy
B	Dielectric	Low density PTFE
C	Outer shield	Nickel plated copper alloy

Standards Compliance

- MIL-DTL-17H

Figure 8: Semi-Rigid Coax Cables



Features and Benefits

- Cut off frequency up to 65GHz
- Working temperature range(-65~250 °C)
- Impedance control and excellent VSWR performance
- Low attenuation and lightest weight for any given geometry
- Very tight bend radii allow utilization in the tightest configurations
- Can be adapted to Numerous connector options available off the shelf from many different suppliers

Typical Applications

- Quantum computer
- Mobile communication
- Radar
- Electronic countermeasure
- Precision instruments
- Aerospace Systems

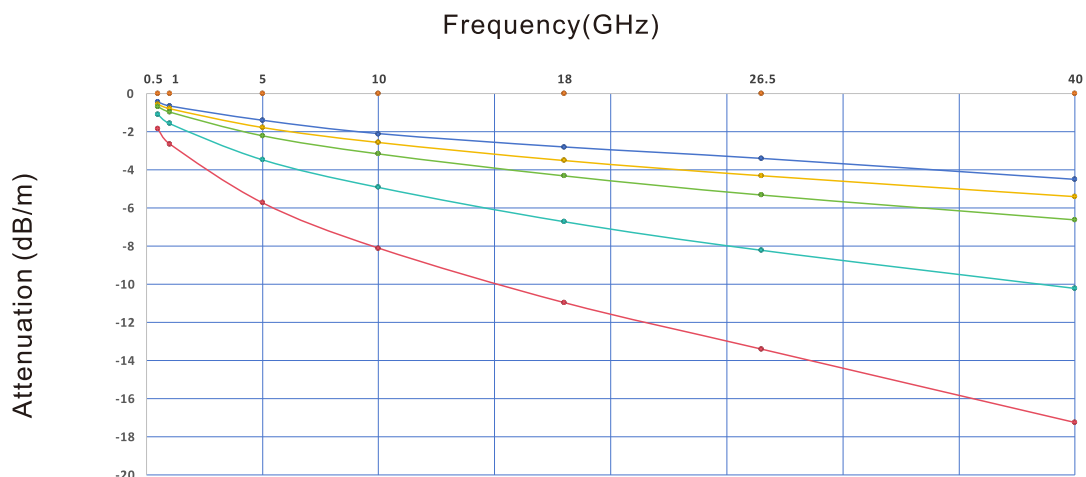


Figure 9: Attenuation VS. Frequency-Semi-Rigid Coax Cables

— 16001086 — 16001063 — 16001047 — 16001034 — 16701023

Semi-Rigid Coax Cables

Phase Stable

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Semi-Rigid Coax Cables					
Physical and Mechanical Properties					
Category	16001086	16001063	16001047	16001034	16001023
Conductor(mm)	0.51	0.405	0.32	0.20	0.14
Dielectric(mm)	1.68	1.18	0.93	0.58	0.47
Outer shield(mm)	2.20	1.60	1.19	0.86	0.58
Weight(g/m)	23.0	11.0	5.90	3.30	1.80
Electrical Parameters					
Impedance(Ω)	50	50	50	50	50
Shielding Effectiveness(dB)	>100dB	>100dB	>100dB	>100dB	>100dB
Velocity of propagation(%)	80	78	78	78	78
Capacitance(pF/m)	85	85	85	87	87
Frequency(GHz)	40	40	40	40	40
Operating Temperature($^{\circ}\text{C}$)	-65~250	-65~250	-65~250	-65~250	-65~250
Frequency(GHz)	Typical Attenuation(dB/m) (+25 $^{\circ}\text{C}$ Environment; Sea level)				
0.5	0.45	0.55	0.70	1.10	1.85
1.0	0.65	0.80	0.95	1.55	2.65
5.0	1.40	1.80	2.20	3.45	5.75
10.0	2.05	2.55	3.15	4.90	8.10
18.0	2.80	3.50	4.30	6.70	11.00
26.5	3.40	4.30	5.30	8.20	13.40
40.0	4.50	5.40	6.60	10.20	17.30

If you need more information or customized products based on actual applications, please contact us.