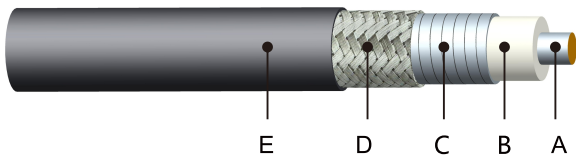


Microwave Coax Cables

Ultra Phase Stable
70 GHz | 77% VP

LINCOS's Ultra Phase Stable Microwave Coax Cables using silver plated copper as center conductor which can meet aerospace requirements and expanded PTFE as dielectric which has low dielectric constant and low loss tangent. ePTFE is a wide temperature range material that can maintain low thermal shrinkage ratio from -180°C to 260°C, providing excellent temperature phase stability for cables. The silver plated flat outer conductor tightly wrapped and embedded in soft dielectric, ensuring the relative position stability of the inner and outer conductors in various extreme application environments such as bending or vibration, thereby ensuring the stability of mechanical phase and amplitude of cables.

Figure 4: Cable Construction



Cable Construction

Item	Construction	Material
A	Conductor	Solid SPC
B	Dielectric	Low density PTFE
C	Outer Conductor	Wrapped flat SPC
D	Mechanical shield	SPC round wire braid
E	Jacket	FEP

Figure 5: Microwave Coax Cables



Features and Benefits

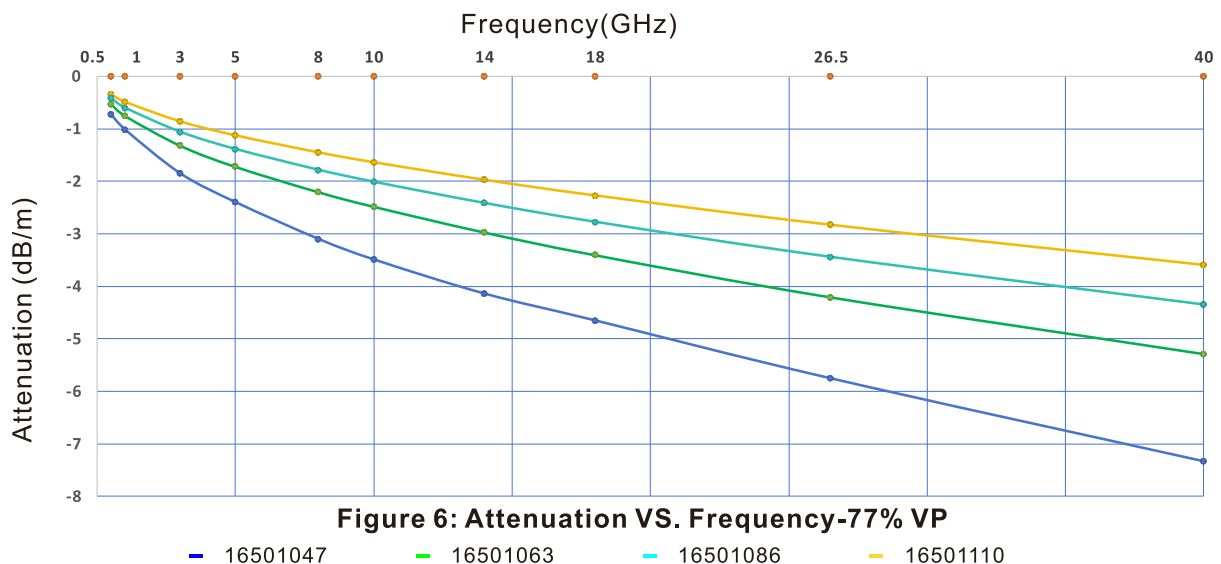
- Low insertion loss
- Mechanical and temperature phase stability
- Phase matching and amplitude stability
- Excellent anti-interference capability
- High flexibility and bending resistance
- Passive-intermodulation
- High power application

Typical Applications

- Automated test systems
- Aerospace
- Environmental test chambers
- Switching matrix
- Antenna arrays
- Telecommunication systems
- Module-to-module interconnect
- General purpose

Standards Compliance

- MIL-C-17



Microwave Coax Cables

Ultra Phase Stable

70 GHz | 77% Vp

Ultra Phase Stable Microwave Coax Cables using silver plated copper as center conductor and ePTFE as dielectric, outer conductor integrate into dielectric closely to ensuring the whole construction stability in extreme application environments. These make the cables have the characteristics of low insertion loss, high using frequency, low time delay and high phase and amplitude stability.

Microwave Coax Cable (77% Vp)				
Physical and Mechanical Properties				
P/N	16501047	16501063	16501086	16501110
Conductor(mm)	0.32	0.41	0.55	0.64
Outer shield(mm)	1.20	1.65	2.12	2.40
Jacket(mm)	1.46	1.95	3.20	2.80
Weight(g/m)	6.5	11.0	17.0	23.0
Electrical Parameters				
Impedance(Ω)	50	50	50	50
Delay(ns/m)	4.3	4.3	4.3	4.3
Shielding Effectiveness(dB)@18GHz	>90dB	>90dB	>90dB	>90dB
Capacitance(pF/m)	87	87	87	87
Frequency(GHz)	40	40	18	18
Operating Temperature($^{\circ}$ C)	-55~125	-55~125	-55~125	-55~125
Frequency(GHz)	Typical Attenuation(dB/3m) (+25 $^{\circ}$ C Environment; Sea level)			
0.5	0.73	0.59	0.46	0.34
1.0	1.02	0.85	0.66	0.48
3.0	1.85	1.49	1.17	0.86
5.0	2.40	1.94	1.53	1.12
10.0	3.49	2.80	2.22	1.64
18.0	4.65	3.84	3.06	2.27
26.5	5.75	4.75	3.79	2.83
40.0	7.33	5.97	4.79	3.60
50.0	8.27	6.77	5.45	4.53
67.0	9.74	8.12	/	/

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