

PS500L-34G

High Frequency Low Loss Phase Stable Coaxial Cable

- Max Operating Frequency: 34 GHz
- Stranded Silver-Plated Copper Inner Conductor (19 / 0.204 mm)
- Low-Density PTFE (LD-PTFE) Insulation
- Double Shielding: Silver Plated Copper Strip + Wire Braid
- Screening Effectiveness: > 90 dB
- Outer Diameter: 5.00 mm (Blue TPU Jacket)



1. CONSTRUCTION & STRUCTURAL SPECIFICATIONS

Structure Layer	Item / Parameter	Material / Specification	Nom. O.D. (mm)
Inner Conductor	Material	Silver Plated Copper	1.02
	Construction	19 / 0.204 mm	
Insulation	Material	LD-PTFE	3.00
Inner Shield	Material	Silver Plated Copper Strip	3.20
Outer Shield	Material	Silver Plated Copper Wire	3.72
Jacket	Material	Blue TPU	5.00

2. ELECTRICAL PERFORMANCE SPECIFICATIONS

Parameter	Standard Value
Impedance	50 Ω
Capacitance	88 pF/m
Velocity of Propagation	76%
Max Operating Frequency	34 GHz
Screening Effectiveness	> 90 dB
Dielectric Withstanding Voltage	1800 V DC

3. ATTENUATION & POWER HANDLING CHARACTERISTICS (@25°C & SEA LEVEL)

Insertion Loss Formula: $IL = K1 * \sqrt{F_MHz} + K2 * F_MHz$

Frequency (MHz)	Nominal Attenuation (dB/100m)	Max Power Handling (W @ 40°C)
500	26.68	531
1000	38.47	368
2400	61.75	229
3000	69.84	203
6000	103.22	137
8000	121.90	116
10000	138.96	102
12400	157.94	90
18000	198.03	72
20000	211.34	67
26500	252.07	56