

PS600L-25G

High Frequency Low Loss Phase Stable Coaxial Cable

- Maximum Operating Frequency: 25 GHz
- Velocity of Propagation: 76% (LD-PTFE Dielectric)
- High Power Handling Performance
- Screening Effectiveness: >90 dB
- Nominal Outer Diameter: 6.00 mm (Blue TPU Jacket)



1. CABLE CONSTRUCTION & STRUCTURAL SPECIFICATIONS

Structure Layer	Item / Parameter	Material / Specification	Nom. O.D. (mm)
Inner Conductor	Material	Silver Plated Copper	1.45
	Construction	19/0.29 mm	
Insulation	Material	LD-PTFE	4.25
Inner Shield	Material	Silver Plated Copper Strip	4.45
Outer Shield	Material	Silver Plated Copper Wire	4.85
Jacket	Material	Blue TPU	6.00

2. ELECTRICAL CHARACTERISTICS

Parameter	Specification	Parameter	Specification
Impedance	50 Ω	Capacitance	88 pF/m
Velocity of Propagation	76%	Max Operating Frequency	25 GHz
Screening Effectiveness	> 90 dB	Dielectric Withstanding Voltage	2000 V@DC
Phase Change vs. Bending	±0.3 °/GHz	Phase Change vs. Temp (-45~+85°C)	≤ 1500 PPM

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

Calculation Formula: $IL = K1 * \sqrt{F_MHz} + K2 * F_MHz$
Constants: $K1 = 0.880600$ $K2 = 0.000900$

Frequency (MHz)	Attenuation (dB/100m)	Power Handling (W)
500	20.14	829 Model: PS600L-25G
1000	28.75	581
2400	45.30	369
3000	50.93	328
6000	73.61	227
8000	85.96	194
10000	97.06	172
12400	109.22	153
15000	121.35	138
18000	134.34	124
20000	142.54	117

4. MECHANICAL & ENVIRONMENTAL PERFORMANCE

Property	Value / Requirement
Min Bending Radius (Static)	24.00 mm
Min Bending Radius (Dynamic)	48.00 mm
Weight	0.072 kg/m
Operating Temperature Range	-55 ~ +85 °C