

PS360L-61G-PE

High Frequency Low Loss Phase Stable Coaxial Cable

- Maximum Operating Frequency: 61 GHz
- Phase Stability vs Flexure: $\pm 0.3^{\circ}/\text{GHz}$
- Excellent Shielding Effectiveness ($>110\text{ dB}$)
- Nominal Outer Diameter: 3.56 mm
- High-performance Thermoplastic Elastomer Outer Jacket



1. CABLE CONSTRUCTION & STRUCTURAL SPECIFICATIONS

Structure Layer	Item / Parameter	Material / Specification	Nom. O.D. (mm)
Inner Conductor	Material	Silver Plated Copper	0.53
	Construction	1/0.53 mm	
Insulation	Material	PTFE	1.68
Inner Shield	Material	SC Foil	1.88
Inner Shield Braid	Material	Round Silver Plated Copper Braided Wire	2.25
Outer Shield Braid	Material	Round Silver Plated Copper Braided Wire	2.65
Jacket	Material	High Performance Thermoplastic Elastomer	3.56

2. ELECTRICAL CHARACTERISTICS

Parameter	Specification	Parameter	Specification
Impedance	50 Ω	Capacitance	95 pF/m
Velocity of Propagation	70%	Max Operating Frequency	61 GHz
Screening Effectiveness	$> 110\text{ dB}$	Dielectric Withstanding Voltage	1000 V@DC
Phase Change vs. Bending	$\pm 0.3^{\circ}/\text{GHz}$	Phase Change vs. Temperature	N/A

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

Calculation Formula: $IL = K1 * \text{sqrt}(F_MHz) + K2 * F_MHz$
Constants: $K1 = 63.64829396$ $K2 = 2.919947507$

Frequency (GHz)	Attenuation (dB/100m)	Power Handling (W)
0.5	46.47	288
1.0	66.57	201
3.0	119.00	112
4.0	138.98	96
6.0	173.43	77
8.0	203.38	66
10.0	230.47	58
12.0	255.52	52
18.0	322.60	41
26.5	405.03	33
40.0	519.35	26

4. MECHANICAL & ENVIRONMENTAL PERFORMANCE

Property	Value / Requirement
Min Bending Radius (Static)	9.5 mm
Min Bending Radius (Dynamic)	19.0 mm
Weight	28 g/m
Operating Temperature Range	-55 ~ +125 °C