

PS360L-40G-GF

3.60mm Flexible 40GHz Low Loss Phase Stable Coaxial Cable (Gray FEP)



Max Frequency: 40 GHz
Inner Shield: SPC Strip Tape

Velocity of Prop.: 83%
Jacket: Gray FEP (3.60mm)

1. Physical & Construction Specifications

Construction Layer	Material	Construction (mm)	Diameter (mm)
1. Inner Conductor	Silver Plated Copper (SPC)	1 / 0.91	0.91
2. Dielectric Insulation	Low Density PTFE (LD-PTFE)	-	2.50
3. Inner Shield	Silver Plated Copper Strip (Helical Tape)	-	2.66
4. Outer Shield	Silver Plated Copper Wire Braid	-	3.11
5. Outer Jacket	Gray Fluorinated Ethylene Propylene (FEP)	-	3.60

2. Electrical Performance Specifications

Impedance	50 Ω	Capacitance	80 pF/m
Max Operating Frequency	40 GHz	Velocity of Propagation	83 %
Screening Effectiveness	> 90 dB	Dielectric Withstanding Voltage	1000 V DC
Phase Stability vs Bending	±0.3 °/GHz	Phase Stability vs Temp (-45~+85°C)	≤ 750 PPM

3. Mechanical & Environmental Specifications

Min. Bending Radius (Static)	16.0 mm	Operating Temperature Range	-55 °C to +165 °C
Min. Bending Radius (Dynamic)	36.0 mm	Weight	0.032 kg/m

4. High-Frequency Attenuation & Power Handling

Attenuation Formula: IL (dB/100m) = 0.986836837 * sqrt(F_MHz) + 0.000547893 * F_MHz (@ 25°C)		
Frequency (MHz)	Nom. Attenuation (dB/100m)	Max Power Handling (W @ 40°C)
500	26.40	725
1000	37.50	510
3000	65.65	292
4000	76.10	252
6000	93.81	204
8000	108.91	176
10000	122.35	156
12400	136.94	140
18000	166.67	115
26500	204.79	93
40000	255.69	75

Series Note: PS360L-40G-GF is designed with an SPC Strip inner shield for superior mmWave attenuation performance up to 40GHz. For sub-18GHz optimized applications, refer to sister model **PS360L-40G-BF** (Blue FEP / Foil Shield).