

PS360L-40G-F

40GHz Solid-Conductor Phase-Stable Coaxial Cable

Product Overview: PS360L-40G-F is a high-performance 50 Ohm microwave coaxial cable designed for low insertion loss up to 40 GHz. Featuring a 0.91mm solid conductor, low-density PTFE dielectric, dual shielding, and a blue FEP jacket rated from -55°C to +125°C.



- **Frequency Range:** DC to 40 GHz
- **Inner Conductor:** 1/0.91 mm Solid Silver Plated Copper
- **Impedance:** 50 Ω | **Velocity:** 76%
- **Shielding Effectiveness:** > 90 dB
- **Jacket Material:** High Thermal Resistance Blue FEP

1. Structure Characteristics

Layer	Item	Material	Nom. O.D. (mm)
Inner Conductor	1/0.91 mm Solid Wire	Silver Plated Copper	0.91
Insulation	Low Density Dielectric	LD-PTFE	2.70
Inner Shield	Helical Tape Wrap	Self-adhesive Aluminium Foil	2.78
Outer Shield	Outer Braid Wire	Silver Plated Copper Wire	3.18
Jacket	Protective Outer Layer	Blue FEP	3.60

2. Electrical & Mechanical Specifications

Electrical Parameter	Value	Mechanical / Env. Parameter	Value
Impedance	50 Ω	Min. Bending Radius (Static)	18.0 mm
Capacitance	88 pF/m	Min. Bending Radius (Dynamic)	36.0 mm
Velocity of Propagation	76%	Weight	0.029 kg/m
Shielding Effectiveness	> 90 dB	Operating Temperature	-55°C to +125°C
Dielectric Withstanding Voltage	1000 V DC	Max Operating Frequency	40 GHz

3. Attenuation & Power Handling Performance

Attenuation Formula: $IL = K1 * \sqrt{F_MHz} + K2 * F_MHz$ | $K1 = 1.204032$, $K2 = 0.001196918$

Frequency (MHz)	Nom. Attenuation (dB/100m)	Max Power Handling (W @ 40°C & Sea Level)
500	27.52	637
1000	39.27	446
2400	61.86	283
3000	69.54	252
6000	100.45	175
8000	117.27	149
10000	132.37	132
12400	148.92	118
18000	183.08	96
26500	227.72	77
40000	288.68	61