PS160L-110G-F

110GHz Micro Flexible Phase Stable Coaxial Cable

- **Max Frequency:** DC to 110 GHz
- **Impedance:** 50 Ω nominal
- **Phase Stability:** ±0.3 °/GHz vs Bending
- **Shielding Effectiveness:** > 90 dB
- **Cross Reference:** TFlex-402

1. CONSTRUCTION & PHYSICAL DIMENSIONS

Item	Material	Construction (mm)	Nom. O.D. (mm)
Inner Conductor	Silver Plated Copper	1 / 0.30	0.30
Insulation	Solid PTFE	-	0.97
Inner Shield	Silver Plated Copper Strip	-	1.12
Outer Shield	Silver Plated Copper Wire Braid	-	1.32
Jacket	Blue FEP	-	1.60

2. MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Min. Bend Radius (Static)	10.0 mm	**Operating Temp. Range**	-55 ℃ to +125 ℃
Min. Bend Radius (Dynamic)	20.0 mm	**Nominal Weight**	0.010 kg/m

3. ELECTRICAL CHARACTERISTICS

Impedance	50 Ω	**Velocity of Propagation**	70%
Max Operating Frequency	110 GHz	**Capacitance**	94 pF/m
Shielding Effectiveness	> 90 dB	**Withstanding Voltage**	500 V DC
Phase Change vs Bending	±0.3 °/GHz		

4. HIGH FREQUENCY ATTENUATION & POWER HANDLING

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Insertion Loss Formula: IL = K1 * sqrt(F_MHz) + K2 * F_MHz  |  K1 = 3.327431, K2 = 0.005315
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Frequency (MHz)	Attenuation (dB/100m @ 25℃)	Power Handling (W @ 40℃)
500	77.08	123
1000	110.53	86
3000	198.19	48
6000	289.47	33
10000	385.90	25
16000	505.78	19
18000	542.14	17
26500	683.73	14
40000	883.18	11
50000	1010.53	9
67000	1208.57	8
110000	1688.08	5