

PS520L-28G-P

Phase Stable Low Loss Coaxial Cable (28 GHz)

Precision flexible coaxial cable featuring LD-PTFE dielectric and triple-shielding architecture. Designed for microwave communications, test equipment, and phase-critical RF systems requiring stable performance across wide operating temperatures.

Max Frequency: 28.0 GHz	Impedance: 50 Ω
Phase vs Flexure: ±0.2° / GHz	Shielding: > 90 dB



STRUCTURE & MATERIALS

Layer	Material	Construction (mm)	Nom. O.D. (mm)
Inner Conductor	Silver Plated Copper	1 / 1.29	1.29
Insulation	LD-PTFE	-	3.91
Inner Shield	Silver Plated Copper Strip	-	4.12
Interlayer	High Temp Aluminum Foil	-	4.26
Outer Shield	Silver Plated Copper Braid	-	4.78
Jacket	Black TPU	-	6.00

ELECTRICAL SPECS

Impedance	50 Ω
Velocity of Prop.	76%
Capacitance	88 pF/m
Shielding Effect.	> 90 dB
Max Frequency	28 GHz
Withstanding Volt.	1800 V DC
Phase vs Temp.	≤ 1500 PPM

MECHANICAL SPECS

Min. Bend (Static)	18.00 mm
Min. Bend (Dynamic)	36.00 mm
Weight	0.060 kg/m
Operating Temp.	-55 to +200 °C

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

Attenuation Calculation Formula: $IL = K1 \cdot \sqrt{F_MHz} + K2 \cdot F_MHz$ | $K1 = 0.856234$, $K2 = 0.0005906$

Freq. (MHz)	Nom. Attenuation (dB/100m)	Max Power (W @ 40°C)	Freq. (MHz)	Nom. Attenuation (dB/100m)	Max Power (W @ 40°C)
500	19.44	1065	10000	91.53	226
1000	27.67	749	12400	102.67	202
2400	43.36	478	18000	125.51	165
3000	48.67	426	20000	132.90	156
6000	69.87	296	26500	155.04	134
8000	81.31	255	-	-	-

