

PS780L-18G-F

High Frequency Low Loss Phase Stable Coaxial Cable

- Max Frequency: 18 GHz
- Velocity of Propagation: 83%
- Phase Stability vs Flexing: $\pm 0.3^{\circ}/\text{GHz}$
- Construction: Solid Conductor + Dual Shielding
- Cross Reference: Direct equivalent to UFB311A



STRUCTURE & CONSTRUCTION SPECIFICATIONS

Structure Layer	Material	Construction	Nom. O.D. (mm)
Inner Conductor	Silver Plated Copper	1 / 2.30 mm (Solid)	2.30
Insulation	LD-PTFE	-	6.30
Inner Shield	Silver Plated Copper Strip	Helical Wrap	6.60
Outer Shield	Silver Plated Copper Wire	Braid	7.15
Jacket	Gray FEP	-	7.80

ELECTRICAL CHARACTERISTICS

Impedance	50 Ohm	Max Frequency	18 GHz
Velocity of Propagation	83%	Screening Effectiveness	> 90 dB
Capacitance	80 pF/m	Dielectric Withstanding Voltage	2500 V DC
Phase Change vs Bending	$\pm 0.3^{\circ}/\text{GHz}$	Phase Change vs Temp (-45~+85°C)	$\leq 750 \text{ PPM}$

ATTENUATION & POWER HANDLING PERFORMANCE

$$IL = K1 * \text{sqrt}(F_MHz) + K2 * F_MHz \text{ (dB/100m)} \mid K1 = 0.45630, K2 = 0.00032$$

Freq (MHz)	Att. (dB/100m @ 25°C)	Power (W @ 40°C)	Freq (MHz)	Att. (dB/100m @ 25°C)	Power (W @ 40°C)
500	10.36	2580	8000	43.37	616
1000	14.75	1813	10000	48.83	548
2000	21.05	1270	12000	53.83	497
3000	25.95	1030	16000	62.84	425
4000	30.14	887	18000	66.98	399
6000	37.26	717	-	-	-

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Min. Bending Radius (Static)	39.0 mm	Weight	0.130 kg/m
Min. Bending Radius (Dynamic)	78.0 mm	Operating Temp Range	-55 to +165 °C

Replacement Notice: Form, fit, and function equivalent to UFB311A.