

PSE780L-18G-F

Enhanced Triple Shielded Phase Stable Coaxial Cable

- Max Frequency:** 18 GHz
- Shielding:** Triple Shielded (Tape + Foil + Braid)
- Velocity of Propagation:** 83%
- Screening Effectiveness:** > 95 dB
- Cross Reference:** Direct equivalent to MAXGAIN-300



780 Series Selection Note: **PSE780L-18G-F** (Triple shield foil, Enhanced EMI immunity) | **PS780L-18G-F** (Solid conductor, Standard low loss) | **PS780LS-18G-F** (Stranded conductor, High flexibility)

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
Middle Shield	High Heat Aluminum Foil	Wrap	6.70
Outer Shield	Silver Plated Copper Wire	Braid	7.25
Jacket	Light Blue FEP	-	7.90

ELECTRICAL CHARACTERISTICS

Impedance	50 Ohm	Max Frequency	18 GHz
Velocity of Propagation	83%	Screening Effectiveness	> 95 dB
Capacitance	80 pF/m	Dielectric Withstanding Voltage	2500 V DC
Phase Change vs Bending	±0.3 °/GHz	Phase Change vs Temp (-45~+85°C)	≤ 750 PPM

ATTENUATION & POWER HANDLING PERFORMANCE

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

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

RF Coaxial Cable Technical Datasheet			
Min. Bending Radius (Static)	40.0 mm	Weight	0.135 kg/m
Min. Bending Radius (Dynamic)	80.0 mm	Operating Temp Range	-55 to +165 °C

Replacement Notice: Enhanced form, fit, and function equivalent to MAXGAIN-300.