

PS780LS-18G-F

High Flexibility Phase Stable Coaxial Cable

- Max Frequency:** 18 GHz
- Conductor:** 19/0.48 mm Stranded Silver-Plated Copper
- Velocity of Propagation:** 83%
- Phase Stability vs Flexing:** ±0.3°/GHz
- Cross Reference:** Direct equivalent to UFB293C / HF290S



780 Series Selection Note: **PS780LS-18G-F** (Stranded conductor, High flex) | **PS780L-18G-F** (Solid conductor, Lower attenuation) | **PS780L-18G-A** (Triple shield foil, High EMI immunity)

STRUCTURE & CONSTRUCTION SPECIFICATIONS

Structure Layer	Material	Construction	Nom. O.D. (mm)
Inner Conductor	Silver Plated Copper	19 / 0.48 mm (Stranded)	2.40
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	±0.3 °/GHz	Phase Change vs Temp (-45~+85°C)	≤ 750 PPM

ATTENUATION & POWER HANDLING PERFORMANCE

$IL = K1 * \sqrt{F_MHz} + K2 * F_MHz \text{ (dB/100m)}$ | $K1 = 0.51830, K2 = 0.00032$

Freq (MHz)	Att. (dB/100m @ 25°C)	Power (W @ 40°C)	Freq (MHz)	Att. (dB/100m @ 25°C)	Power (W @ 40°C)
500	11.75	2269	8000	48.91	542
1000	16.71	1594	10000	55.03	482
2000	23.82	1117	12000	60.64	437
3000	29.35	906	16000	70.62	374
4000	34.07	780	18000	75.30	351
6000	42.08	631	-	-	-

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

RF Coaxial Cable Technical Datasheet			
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 UFB293C and HF290S.