

PS740L-20G-F

High Frequency Low Loss Phase Stable Coaxial Cable (20GHz, FEP)

- Frequency Range:** DC to 20 GHz with 50 Ohm impedance.
- Ultra-Low Loss Dielectric:** Low-Density PTFE (LD-PTFE) with 83% VP.
- Phase Stability:** Excellent phase vs. bending (± 0.3 °/GHz) and temperature (≤ 750 PPM).
- Dual Shielding & FEP Jacket:** Silver-plated copper strip + braid (>90 dB efficiency) with Gray FEP outer jacket.



1. PHYSICAL & CONSTRUCTION SPECIFICATIONS

Construction Element	Material Specification	Construction (mm)	Nom. O.D. (mm)
Inner Conductor	Silver Plated Copper (SPC)	1 / 2.10	2.10
Insulation Dielectric	Low-Density PTFE (LD-PTFE)	-	5.75
Inner Shield	Silver Plated Copper Strip	Helical Wrap	6.07
Outer Shield	Silver Plated Copper Braid Wire	Coverage $\geq 90\%$	6.60
Outer Jacket	Fluorinated Ethylene Propylene (Gray FEP)	-	7.40

2. MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification Value	Parameter	Specification Value
Min. Bend Radius (Static)	25.5 mm	Cable Weight	0.116 kg/m
Min. Bend Radius (Dynamic)	51.0 mm	Operating Temperature	-55 °C to +165 °C

3. ELECTRICAL PERFORMANCE PARAMETERS

Parameter	Value	Parameter	Value
Impedance	50 Ω	Dielectric Withstanding Voltage	2100 V DC
Capacitance	80 pF/m	Phase Stability vs. Bending	± 0.3 °/GHz
Velocity of Propagation (VP)	83%	Phase Stability vs. Temperature	≤ 750 PPM (-45~+85°C)
Max. Operating Frequency	20 GHz	Screening Effectiveness	> 90 dB

4. ATTENUATION & POWER HANDLING DATA

Frequency (MHz)	Nom. Attenuation (@25°C, Sea Level) (dB/100m)	Max. Power Handling (@40°C, Sea Level) (W)
300	9.15	3185
500	11.82	2465
1000	16.75	1740
2000	23.74	1227
3000	29.14	1000
6000	41.39	704
8000	47.90	608
10000	53.67	543
12400	59.89	486
18000	72.48	402
20000	76.51	381

Insertion Loss Formula: $IL = K1 * \sqrt{F_MHz} + K2 * F_MHz$ (dB/100m) | $K1 = 0.526279, K2 = 0.000104$

Cross Reference Replacement: Compatible alternative to GORE CXN3450.