

PS520LS-25G-F

High-Flexibility Stranded Low Loss Coaxial Cable (50 Ω / DC–25 GHz)

Key Features



- **19/0.29 Stranded Inner Conductor** for High Flex Fatigue Life
- Broadband Performance: DC to 25 GHz
- Low Density PTFE (LD-PTFE) for High Velocity of Propagation (83%)
- Double Shielding System (Al-Foil + SPC Braid) with > 90 dB Screening
- Compact 5.20 mm Blue FEP Outer Jacket (-55°C to +85°C)

1. Construction & Dimension Specifications

Layer	Material	Construction Details	Nom. O.D. (mm)
Inner Conductor	Silver Plated Copper (SPC)	19 / 0.29 (Stranded)	1.45
Insulation	LD-PTFE (Low Density PTFE)	Low-Loss Wrapped Tape	4.20
Inner Shield	Self-adhesive Aluminium Foil	Helical Wrap	4.28
Outer Shield	Silver Plated Copper Wire Braid	High-Coverage Woven Braid	4.73
Jacket	Blue FEP	High Temperature Extruded	5.20

2. Electrical Performance

Impedance	50 ± 1.5 Ω
Capacitance	88 pF/m
Velocity of Propagation	83%
Max Frequency	25 GHz
Screening Effectiveness	> 90 dB
Dielectric Voltage	2000 V@DC

3. Mechanical Performance

Conductor Style	19-Strand High-Flex Core
Min. Bend Radius (Single)	25 mm
Min. Bend Radius (Repeated)	50 mm
Operating Temp. Range	-55°C to +85°C

4. Attenuation & Power Handling Ratings (@40°C & Sea Level)

Frequency (MHz)	Nom. Attenuation (dB/100m)	Max Power Handling (W)	Frequency (MHz)	Nom. Attenuation (dB/100m)	Max Power Handling (W)
300	17.74	1158	8000	98.67	208
500	23.02	891	10000	111.40	184
1000	32.88	624	12400	125.71	163
2000	47.13	435	15000	140.00	146
3000	58.31	352	18000	155.45	132
6000	84.40	243	25000	186.14	110

Insertion Loss Formula: IL (dB/100m) = K1 * √(F_MHz) + K2 * F_MHz | K1 = 1.005200, K2 = 0.001088