YSLLPS-520A

26.5 GHz, φ5.20 mm Low-Loss Phase-Stable RF Cable Assembly

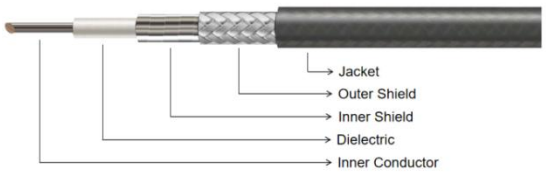
Key Features

- Outstanding Phase Stability vs. Temperature
- Ultra-Low Insertion Loss
- High Power Capability
- Excellent Low PIM Performance
- Lightweight and Rugged Construction

Applications

- Phased Array Radar
- Aerospace & Avionics Systems
- Electronic Warfare and Defense Systems
- Low-Loss Phase-Critical Applications

Cable Construction



Cable Type	Dia.(mm)	Material
Inner Conductor	Φ1.45	Silver plated Copper
Dielectric	Φ3.99	Low Density PTFE
Inner Shield	Φ4.19	Silver Plated Copper Strip
Outer Shield	Φ4.60	Silver Plated Copper Braid
Jacket	Φ5.20	PFA

Electrical Specifications		**Mechanical Specifications**	
Operating Freq.	26.5 GHz	Static Bending Radius	26 mm
Cut-off Freq.	29 GHz	Dynamic Bending Radius	52 mm
Impedance	50 Ω	Weight	60 g/m
Velocity of Propagation	83%	**Environmental Specifications**	
Shielding Effectiveness	>90 dB	Operating Temperature	-55 to +165°C
Dielectric Withstanding Voltage	1500 VDC		
Passive Intermodulation (PIM)	<-155 dBc		
Phase Stability vs. Temperature	<750 PPM @ -55 to +85°C		

Attenuation (dB/100 M,Typical at +25°C) **& Power Handling** (W,Typical at +40°C)

Freq.(GHz)	1	2	3	6	8	10	12.4	18	26.5
Attenuation	23.4	33.3	41.0	58.5	67.9	76.3	85.4	103.8	127.5
Avg. Power	1128	793	645	451	389	346	309	254	207

Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F(MHz)} + K2*F(MHz)$
K1=0.730000, K2=0.000328

Connectors Options

Connectors	Freq.(Max)	VSWR (Max)	Connectors	Freq.(Max)	VSWR (Max)
2.92 mm (K)	40 GHz	1.30:1	TNC(T)	12 GHz	1.25:1
3.5 mm (3)	27 GHz	1.30:1	BNC(B)	4 GHz	1.30:1
SMA (S)	27 GHz	1.25:1	N(N)	18 GHz	1.25:1

Cable Assemblies Naming Rule:

PN: Cable-Length(M)-Connector 1-Connector 2

Eg.: YSLLPS-520A-*1M-SM-SF* means YSLLPS-520A cable,L=1M, SMA(M)-SMA(F).

Add “R” for Right-Angle Connector, Add “H” for Bulkhead Connector (e.g., SMR, SFH).