YSLLPS-765A

18 GHz, φ7.65 mm Low-Loss Phase-Stable RF Cable Assembly

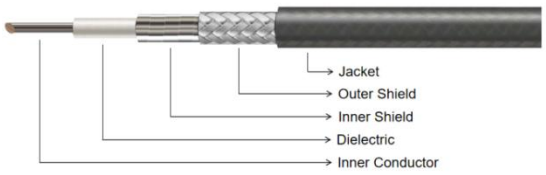
Key Features

- 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	Φ2.39	Silver plated Copper
Dielectric	Φ6.25	Low Density PTFE
Inner Shield	Φ6.49	Silver Plated Copper Strip
Outer Shield	Φ7.06	Silver Plated Copper Braid
Jacket	Φ7.65	PFA

Electrical Specifications		**Mechanical Specifications**	
Operating Freq.	18 GHz	Static Bending Radius	38 mm
Cut-off Freq.	18 GHz	Dynamic Bending Radius	76 mm
Impedance	50 Ω	Weight	120 g/m
Velocity of Propagation	83%	**Environmental Specifications**	
Shielding Effectiveness	>90 dB	Operating Temperature	-55 to +165°C
Dielectric Withstanding Voltage	2500 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	16	18
Attenuation	16.7	23.8	29.3	42.1	48.9	55.0	61.7	70.7	75.3
Avg. Power	1604	1125	913	637	548	487	435	379	356

Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F(MHz)} + K2*F(MHz)$
K1=0.518300, K2=0.000320

Connectors Options

Connectors	Freq.(Max)	VSWR (Max)	Connectors	Freq.(Max)	VSWR (Max)
SMA (S)	27 GHz	1.25:1	SC(G)	6 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-765A-*1M-SM-SF* means YSLLPS-765A cable,L=1M, SMA(M)-SMA(F).

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

Yusntech Inc. yusntech.com sales@yusntech.com