

# YSLLPS-150A

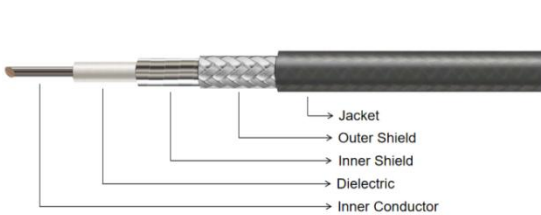
40 GHz,  $\phi$ 1.50 mm Low-Loss Phase-Stable RF Cable Assembly

## 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		$\phi$ 0.30		Silver plated Copper			
			Dielectric		$\phi$ 0.88		Low Density PTFE			
			Inner Shield		$\phi$ 1.00		Silver Plated Copper Strip			
			Outer Shield		$\phi$ 1.18		Silver Plated Copper Braid			
			Jacket		$\phi$ 1.50		PFA			
Electrical Specifications					Mechanical Specifications					
Operating Freq.		40 GHz			Static Bending Radius		8 mm			
Cut-off Freq.		128 GHz			Dynamic Bending Radius		15 mm			
Impedance		50 $\Omega$			Weight		5.4 g/m			
Velocity of Propagation		75%			Environmental Specifications					
Shielding Effectiveness		>90 dB			Operating Temperature		-55 to +125°C			
Dielectric Withstanding Voltage		600 VDC								
Passive Intermodulation (PIM)		<-155 dBc								
Phase Stability vs. Temperature		<1000 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	40
Attenuation	113.7	161.6	198.5	282.9	328.0	368.0	411.3	499.3	611.5	760.4
Avg. Power	39	27	22	16	14	12	11	9	7	6
Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F}(\text{MHz}) + K2*F(\text{MHz})$ $K1=3.557846, K2=0.001221$										
Connectors Options										
Connectors	Freq.(Max)	VSWR (Max)		Connectors	Freq.(Max)	VSWR (Max)				
1.0 mm(1)	110 GHz	1.50:1		SSMP (M)	40 GHz	1.30:1				
1.85 mm(V)	67 GHz	1.30:1								
2.4 mm (2)	50 GHz	1.30:1								
2.92 mm (K)	40 GHz	1.30:1								
SMA (S)	27 GHz	1.25:1								

## Cable Assemblies Naming Rule:

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

Eg.: YSLLPS-150A-1M-SM-SF means YSLLPS-150A cable, L=1M, SMA(M)-SMA(F).

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