

YSRLLPS-390AR

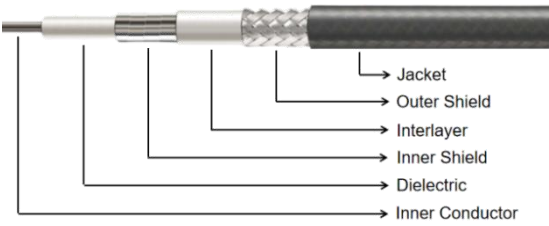
40 GHz, φ3.90 mm Reinforced Low-Loss Phase-Stable Cable Assembly

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	φ0.91	Silver plated Copper							
			Dielectric	Φ2.50	Low Density PTFE							
			Inner Shield	Φ2.66	Silver Plated Copper Strip							
			Interlayer	Φ2.95	Low Density PTFE							
			Outer Shield	Φ3.35	Silver Plated Copper Braid							
			Jacket	Φ3.90	FEP							
Electrical Specifications					Mechanical Specifications							
Operating Freq.	40 GHz				Static Bending Radius	19.5 mm						
Cut-off Freq.	46 GHz				Dynamic Bending Radius	39 mm						
Impedance	50 Ω				Weight	35 g/m						
Velocity of Propagation	82%				Environmental Specifications							
Shielding Effectiveness	>90 dB				Operating Temperature	-55 to +165°C						
Dielectric Withstanding Voltage	1000 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	40		
Attenuation	37.5	53.4	65.6	93.8	108.9	122.3	136.9	166.7	204.8	255.7		
Avg. Power	509	358	291	203	175	156	139	115	93	75		
Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F}(\text{MHz}) + K2*F(\text{MHz})$ K1=1.168470, K2=0.000550												
Connectors Options												
Connectors	Freq.(Max)	VSWR (Max)		Connectors	Freq.(Max)	VSWR (Max)						
2.4 mm (2)	50 GHz	1.30:1		SSMA (M)	40 GHz	1.30:1						
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.: YSRLLPS-390AR-1M-SM-SF means YSRLLPS-390AR cable, L=1M, SMA(M)-SMA(F).

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