

YSRLLPS-510AR

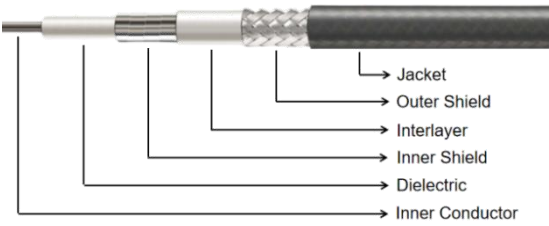
26.5 GHz, ϕ 5.10 mm Reinforced Low-Loss Phase-Stable Cable Assembly

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	Φ 1.40	Silver plated Copper					
			Dielectric	Φ 3.75	Low Density PTFE					
			Inner Shield	Φ 3.95	Silver Plated Copper Strip					
			Interlayer	Φ 4.20	Low Density PTFE					
			Outer Shield	Φ 4.65	Silver Plated Copper Braid					
			Jacket	Φ 5.10	PFA					
Electrical Specifications					Mechanical Specifications					
Operating Freq.	26.5 GHz				Static Bending Radius	26 mm				
Cut-off Freq.	31 GHz				Dynamic Bending Radius	51 mm				
Impedance	50 Ω				Weight	58 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	24.1	34.2	42.1	60.1	69.7	78.3	87.6	106.6	130.8	
Avg. Power	1050	738	600	420	362	323	288	237	193	
Typical Cable Attenuation Calculation Formula: $K1 \cdot \sqrt{F(\text{MHz})} + K2 \cdot F(\text{MHz})$ $K1=0.750400, K2=0.000328$										
Connectors Options										
Connectors	Freq.(Max)	VSWR (Max)				Connectors	Freq.(Max)	VSWR (Max)		
2.92 mm (K)	40 GHz	1.30:1				BNC(B)	4 GHz	1.30:1		
3.5 mm (3)	27 GHz	1.30:1				N(N)	18 GHz	1.25:1		
SMA (S)	27 GHz	1.25:1								
TNC(T)	12 GHz	1.25:1								

Cable Assemblies Naming Rule:

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

Eg.: YSRLLPS-510AR-1M-SM-SF means YSRLLPS-510AR cable, L=1M, SMA(M)-SMA(F).

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