

YSRLLPS-540AR

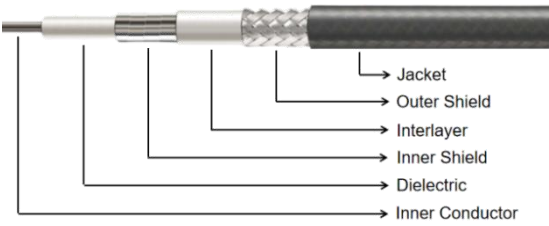
26.5 GHz, ϕ 5.40 mm Reinforced Low-Loss Phase-Stable Cable Assembly

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 1.45	Silver plated Copper			
				Dielectric	Φ 3.99	Low Density PTFE			
				Inner Shield	Φ 4.19	Silver Plated Copper Strip			
				Interlayer	Φ 4.45	Low Density PTFE			
				Outer Shield	Φ 4.85	Silver Plated Copper Braid			
				Jacket	Φ 5.40	PFA			
Electrical Specifications					Mechanical Specifications				
Operating Freq.	26.5 GHz				Static Bending Radius	27 mm			
Cut-off Freq.	29 GHz				Dynamic Bending Radius	54 mm			
Impedance	50 Ω				Weight	63 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: $K1 \cdot \sqrt{F(\text{MHz})} + K2 \cdot F(\text{MHz})$									
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.: YSRLLPS-540AR-1M-SM-SF means YSRLLPS-540AR cable, L=1M, SMA(M)-SMA(F).

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