

YSELLPS-220A

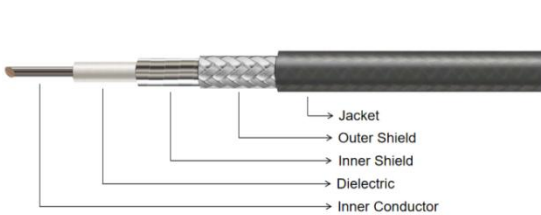
40 GHz, ϕ 2.20 mm Low-Loss Phase-Stable RF Cable Assembly

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		ϕ 0.50		Silver plated Copper			
			Dielectric		ϕ 1.38		Low Density PTFE			
			Inner Shield		ϕ 1.54		Silver Plated Copper Strip			
			Outer Shield		ϕ 1.95		Silver Plated Copper Braid			
			Jacket		ϕ 2.20		PFA			
Electrical Specifications					Mechanical Specifications					
Operating Freq.		40 GHz			Static Bending Radius		11 mm			
Cut-off Freq.		83 GHz			Dynamic Bending Radius		22 mm			
Impedance		50 Ω			Weight		16 g/m			
Velocity of Propagation		81%			Environmental Specifications					
Shielding Effectiveness		>90 dB			Operating Temperature		-55 to +125°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	63.7	90.8	111.9	160.4	186.5	209.8	235.2	287.1	354	444
Avg. Power	110	77	63	44	38	33	30	24	20	16
Typical Cable Attenuation Calculation Formula: $K1 \cdot \sqrt{F(\text{MHz})} + K2 \cdot F(\text{MHz})$ $K1=1.975832, K2=0.001221$										
Connectors Options										
Connectors	Freq.(Max)	VSWR (Max)		Connectors	Freq.(Max)	VSWR (Max)				
1.85 mm(v)	67 GHz	1.30:1		SSMA (M)	40 GHz	1.30:1				
2.4 mm (2)	50 GHz	1.30:1		SSMP (M)	40 GHz	1.30:1				
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								

Cable Assemblies Naming Rule:

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

Eg.: YSELLPS-220A-1M-SM-SF means YSELLPS-220A cable, L=1M, SMA(M)-SMA(F).

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