

YSELLPS-810A

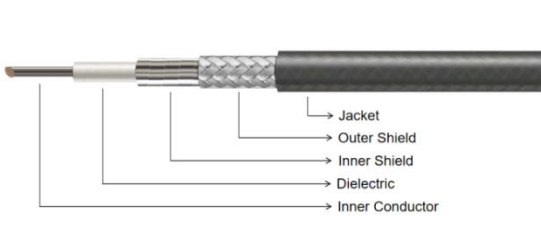
18 GHz, ϕ 8.10 mm Low-Loss Phase-Stable RF Cable Assembly

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 2.40	Silver plated Copper			
				Dielectric	Φ 6.36	Low Density PTFE			
				Inner Shield	Φ 6.60	Silver Plated Copper Strip			
				Outer Shield	Φ 7.10	Silver Plated Copper Braid			
				Jacket	Φ 8.10	PFA			
Electrical Specifications					Mechanical Specifications				
Operating Freq.		18 GHz			Static Bending Radius		41 mm		
Cut-off Freq.		18 GHz			Dynamic Bending Radius		81 mm		
Impedance		50 Ω			Weight		140 g/m		
Velocity of Propagation		83%			Environmental Specifications				
Shielding Effectiveness		>90 dB			Operating Temperature		-55 to +165°C		
Dielectric Withstanding Voltage		3000 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	16	18
Attenuation	13.7	19.5	24.1	34.8	40.6	45.8	51.5	59.3	63.3
Avg. Power	2405	1681	1360	943	808	716	637	554	519
Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F}(\text{MHz}) + K2*F(\text{MHz})$ $K1=0.419490, K2=0.000389$									
Connectors Options									
Connectors	Freq.(Max)	VSWR (Max)			Connectors	Freq.(Max)	VSWR (Max)		
SMA (S)	27 GHz	1.25:1			N(N)	18 GHz	1.25:1		
BNC(B)	4 GHz	1.30:1			SC(G)	6 GHz	1.25:1		

Cable Assemblies Naming Rule:

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

Eg.: YSELLPS-810A-1M-SM-SF means YSELLPS-810A cable, L=1M, SMA(M)-SMA(F).

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