

# YSELLPS-360A

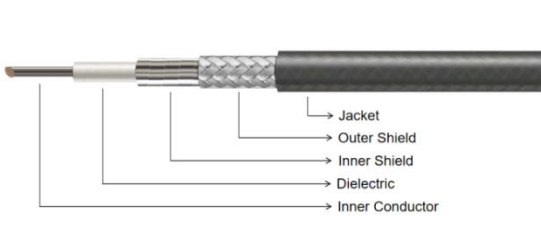
40 GHz,  $\phi$ 3.60 mm Low-Loss Phase-Stable RF Cable Assembly

### 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		$\phi$ 0.91		Silver plated Copper			
			Dielectric		$\phi$ 2.50		Low Density PTFE			
			Inner Shield		$\phi$ 2.66		Silver Plated Copper Strip			
			Outer Shield		$\phi$ 3.11		Silver Plated Copper Braid			
			Jacket		$\phi$ 3.60		PFA			
Electrical Specifications					Mechanical Specifications					
Operating Freq.		40 GHz			Static Bending Radius		18 mm			
Cut-off Freq.		46 GHz			Dynamic Bending Radius		36 mm			
Impedance		50 $\Omega$			Weight		33 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		BNC(B)	4 GHz	1.30:1				
3.5 mm (3)	27 GHz	1.30:1		TNC(T)	12 GHz	1.25:1				
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.: YSELLPS-360A-1M-SM-SF means YSELLPS-360A cable, L=1M, SMA(M)-SMA(F).

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