

# YSHPLL-520B

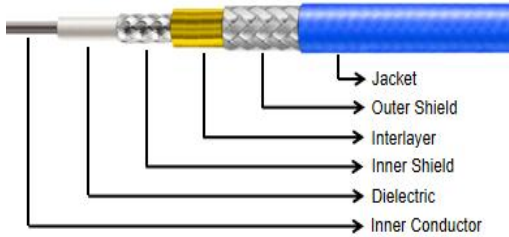
18 GHz,  $\phi$ 5.20 mm High-Power Low-Loss RF Cable Assembly

## Key Features

- High Power Capability
- Ultra-Low Loss
- Excellent Power Efficiency
- Stable RF Performance
- Robust Construction

## Applications

- Radar Systems
- Electronic Warfare
- RF Transmission Systems
- High-Power Test Platforms
- Aerospace & Defense

Cable Construction									
				Cable Type	Dia.(mm)	Material			
				Inner Conductor	$\phi$ 1.29	Silver plated Copper			
				Dielectric	$\phi$ 3.85	Low Density PTFE			
				Inner Shield	$\Phi$ 4.05	Silver Plated Copper Strip			
				Interlayer	$\Phi$ 4.20	High-Temp Aluminum Foil			
				Outer Shield	$\phi$ 4.80	Silver Plated Copper Braid			
				Jacket	$\Phi$ 5.20	FEP			
Electrical Specifications					Mechanical Specifications				
Operating Freq.	18 GHz				Static Bending Radius	26 mm			
Cut-off Freq.	28 GHz				Dynamic Bending Radius	52 mm			
Impedance	50 $\Omega$				Weight	67 g/m			
Velocity of Propagation	76%				Environmental Specifications				
Shielding Effectiveness	>90 dB				Operating Temperature	-55 to +200°C			
Dielectric Withstanding Voltage	2000 VDC								
Passive Intermodulation (PIM)	<-155 dBc								
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	27.7	39.5	48.7	69.9	81.3	91.5	102.7	117.8	125.5
Avg. Power	750	526	426	297	255	227	202	176	165
Typical Cable Attenuation Calculation Formula: $K1 \cdot \sqrt{F(\text{MHz})} + K2 \cdot F(\text{MHz})$ $K1=0.856234, K2=0.000591$									
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							

## Cable Assemblies Naming Rule:

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

Eg.: YSHPLL-520B-1M-SM-SF means YSHPLL-520B cable, L=1M, SMA(M)-SMA(F).

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