YSHPLL-545B

18 GHz, φ5.45 mm High-Power Low-Loss RF Cable Assembly

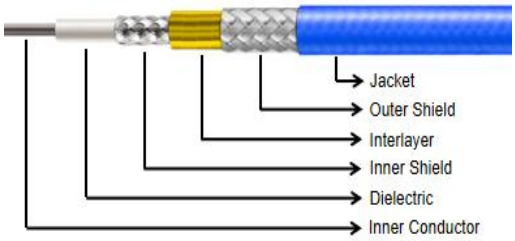
Key Features

- 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	φ1.45	Silver plated Copper
Dielectric	Φ4.18	Low Density PTFE
Inner Shield	Φ4.42	Silver Plated Copper Strip
Interlayer	Φ4.55	High-Temp Aluminum Foil
Outer Shield	φ4.95	Silver Plated Copper Braid
Jacket	Φ5.45	FEP

Electrical Specifications		**Mechanical Specifications**	
Operating Freq.	18 GHz	Static Bending Radius	22 mm
Cut-off Freq.	28 GHz	Dynamic Bending Radius	55 mm
Impedance	50 Ω	Weight	72 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	26.3	37.6	46.3	66.6	77.5	87.3	97.9	112.3	119.8
Avg. Power	810	567	460	320	275	244	218	190	178

Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F(MHz)} + K2*F(MHz)$
K1=1.099485, K2=0.000602

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-545B-*1M-SM-SF* means YSHPLL-545B cable,L=1M, SMA(M)-SMA(F).

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