

YSHTPS-400AH

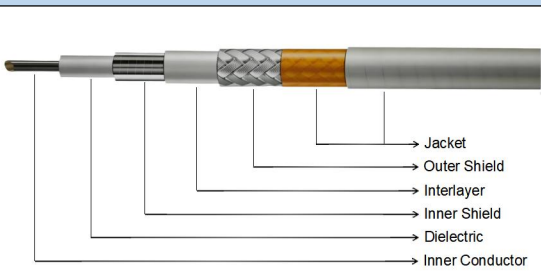
40 GHz, φ4.00 mm High-Temperature Phase-Stable RF Cable Assembly

Key Features

- Low Insertion Loss
- Low VSWR
- High-Temperature Resistant
- Stable Phase Performance
- High Reliability

Applications

- Extreme Temperature Testing
- Missile Communication Systems
- Aerospace Electronics
- High-Temperature RF Platforms
- Defense Communication Systems

Cable Construction										
				Cable Type	Dia.(mm)	Material				
				Inner Conductor	φ0.91	Silver plated Copper				
				Dielectric	φ2.50	Low Density PTFE				
				Inner Shield	φ2.66	Silver Plated Copper Strip				
				Interlayer	φ2.95	Low Density PTFE				
				Outer Shield	φ3.35	Silver Plated Copper Braid				
				Jacket	φ4.00	PI+PTFE				
Electrical Specifications					Mechanical Specifications					
Operating Freq.		40 GHz			Static Bending Radius		20 mm			
Cut-off Freq.		56 GHz			Dynamic Bending Radius		40 mm			
Impedance		50 Ω			Weight		29 g/m			
Velocity of Propagation		82%			Environmental Specifications					
Shielding Effectiveness		>90 dB			Storage Temperature		-55 to +125°C			
Dielectric Withstanding Voltage		1000 VDC			High-Temperature Resistance		400°C @ 400 s			
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	41.2	58.6	72.0	102.9	119.4	134.0	149.9	182.3	223.8	279.1
Avg. Power	509	358	291	204	176	156	140	115	94	75
Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F}(\text{MHz}) + K2*F(\text{MHz})$ $K1=1.285317, K2=0.000550$										
Connectors Options										
Connectors	Freq.(Max)	VSWR (Max)			Connectors	Freq.(Max)	VSWR (Max)			
2.92 mm (K)	40 GHz	1.30:1			TNC(T)	12 GHz	1.25:1			
3.5 mm (3)	27 GHz	1.30:1			BNC(B)	4 GHz	1.30:1			
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.: YSHTPS-400AH-1M-SM-SF means YSHTPS-400AH cable, L=1M, SMA(M)-SMA(F).

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