YSHTPS-540AH

26.5 GHz, φ5.40 mm High-Temperature Phase-Stable RF Cable Assembly

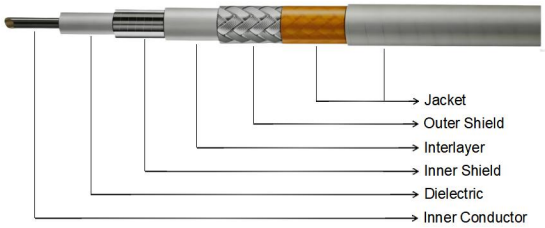
Key Features

- 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	φ1.40	Silver plated Copper
Dielectric	φ3.75	Low Density PTFE
Inner Shield	φ3.95	Silver Plated Copper Strip
Interlayer	φ4.20	Low Density PTFE
Outer Shield	φ4.65	Silver Plated Copper Braid
Jacket	φ5.40	PI+PTFE

Electrical Specifications		**Mechanical Specifications**	
Operating Freq.	26.5 GHz	Static Bending Radius	27 mm
Cut-off Freq.	31 GHz	Dynamic Bending Radius	54 mm
Impedance	50 Ω	Weight	60 g/m
Velocity of Propagation	83%	**Environmental Specifications**	
Shielding Effectiveness	>90 dB	Storage Temperature	-55 to +125°C
Dielectric Withstanding Voltage	1500 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
Attenuation	24.3	34.6	42.7	61.1	71.0	79.9	89.5	109.2	134.5
Avg. Power	1050	737	598	418	359	320	285	234	190

Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F(MHz)} + K2*F(MHz)$
K1=0.754593, K2=0.000440

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-540AH-*1M-SM-SF* means YSHTPS-540AH cable,L=1M, SMA(M)-SMA(F).

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