

Flexible Probe Station Cable

High performance Precision Solution



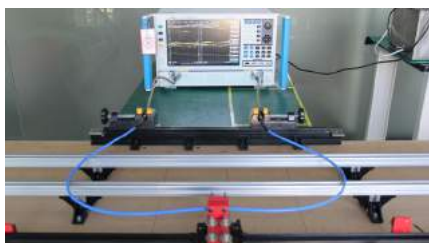
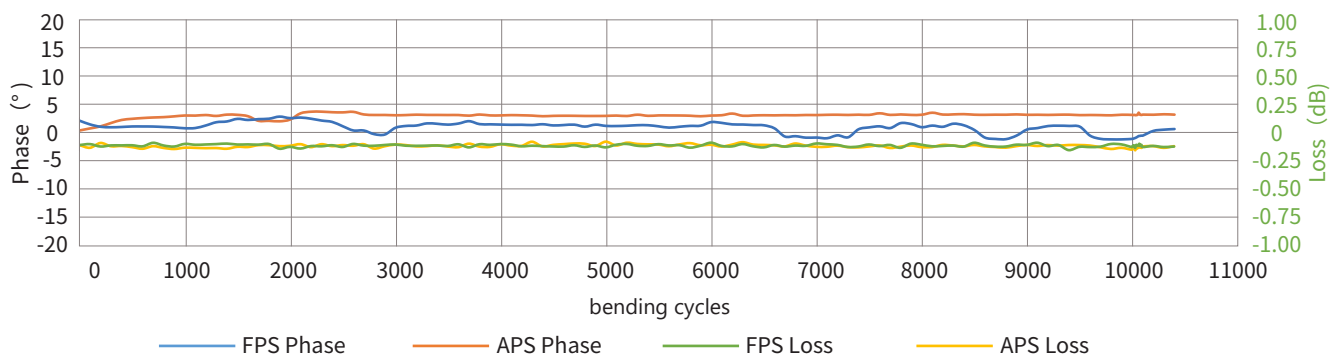
Typical Applications

- High accuracy probe station
- Millimeter wave test measurement
- Semiconductor R & D and production testing
- Optical module & high-speed digital circuit test
- High-density testing and interconnection

Features & Benefit

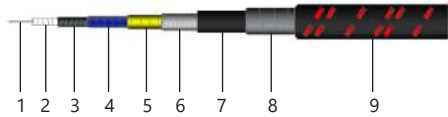
- Low loss and phase stable precision solution
- Highly-reliable performance
- Light weight and flexible configurati
- Operation frequency DC-67GHz
- Armor option available
- RoHS Compliant

Dynamic Phase Stability



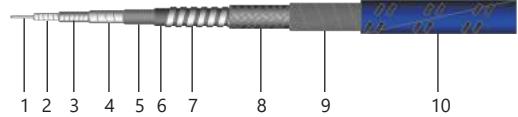
Construction

FPS



- | | |
|--------------------|------------------------|
| 1 Center Conductor | 6 Outer Shield |
| 2 Dielectric | 7 Cable Jacket |
| 3 Outer Conductor | 8 Shake Layer |
| 4 Inner Tape | 9 Braiding(Black-Red) |
| 5 Protective Layer | |

APS



- | | |
|--------------------|--------------------------|
| 1 Center Conductor | 6 Cable Jacket |
| 2 Dielectric | 7 Armor Spring |
| 3 Outer Conductor | 8 Anti-twist Layer |
| 4 Protective Layer | 9 Water Proof Layer |
| 5 Outer Shield | 10 Braiding(Blue-Black) |

Specification

Physical & Mechanical Specification

	FPS	APS
Armor (mm)	3.15	5.00
Weight (g/m)	20	61
Min bend, one-time (mm)	16	13
Min. Bending R:Repeated (mm)	32	28

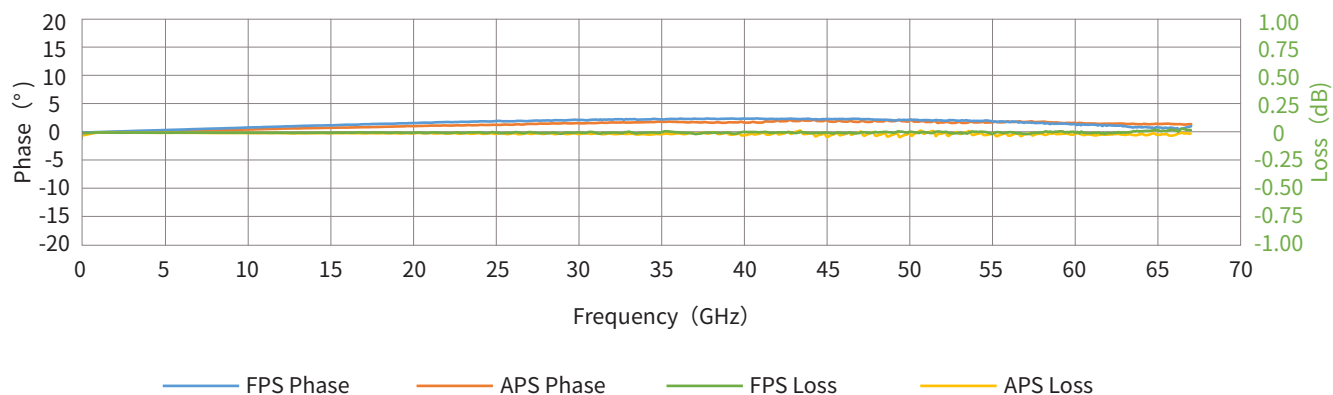
Electrical Specification

Operation Frequency (GHz)	67			
Typical Phase Stability(°)	±10			
Typical Amplitude Stability(dB)	±0.15		±0.05	
Velocity of Propagation	74%			
Impedance (Ohms)	50			
Typical VSWR	1.3			
Maximum VSWR	1.4			
Shielding Effectiveness (dB)	≥ 90			
Voltage Withstand (DC)	500			
Peak Power(kW)	0.63			
Attenuation & Power Handling	Maximum Attenuation & Average Power Handling			
Frequency(MHz)	dB/m	kW	dB/m	kW
18000	2.877	0.059	2.840	0.060
26500	3.559	0.048	3.503	0.049
40000	4.480	0.038	4.394	0.039
50000	5.085	0.034	4.977	0.034
67000	6.019	0.028	5.873	0.029
Attenuation at Frequency	dB/m=(K1×sqrt(FMHz)+K2×FMHz)/100			
K1	1.9500000		1.9537172	
K2	0.0014500		0.0012174	

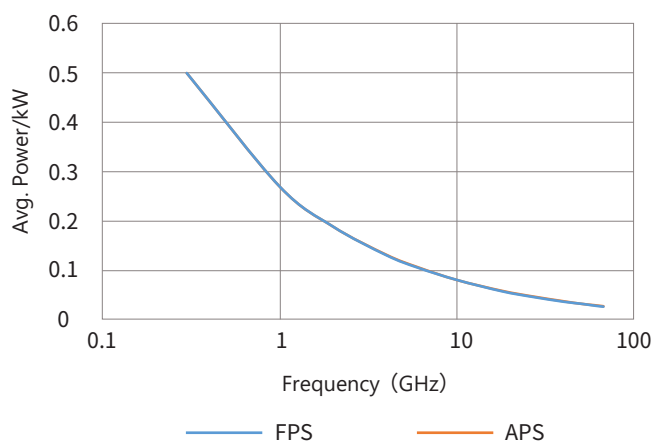
Environmental Specification

Operating Temp Range	-55°C ~125°C
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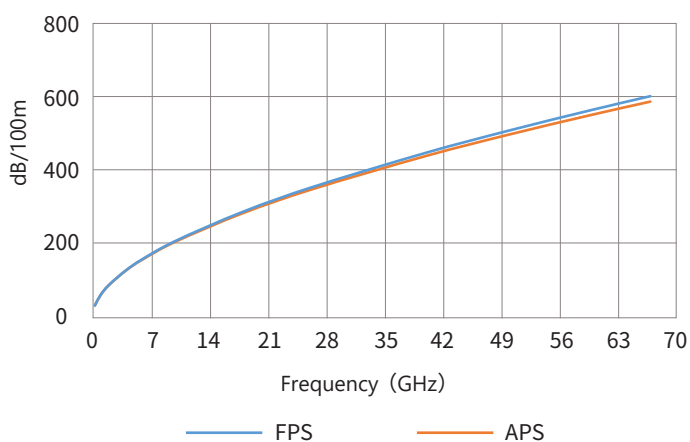
Static Phase Stability Rotate 180° along the minimum repeated bending diameter



Power handling & Attenuation

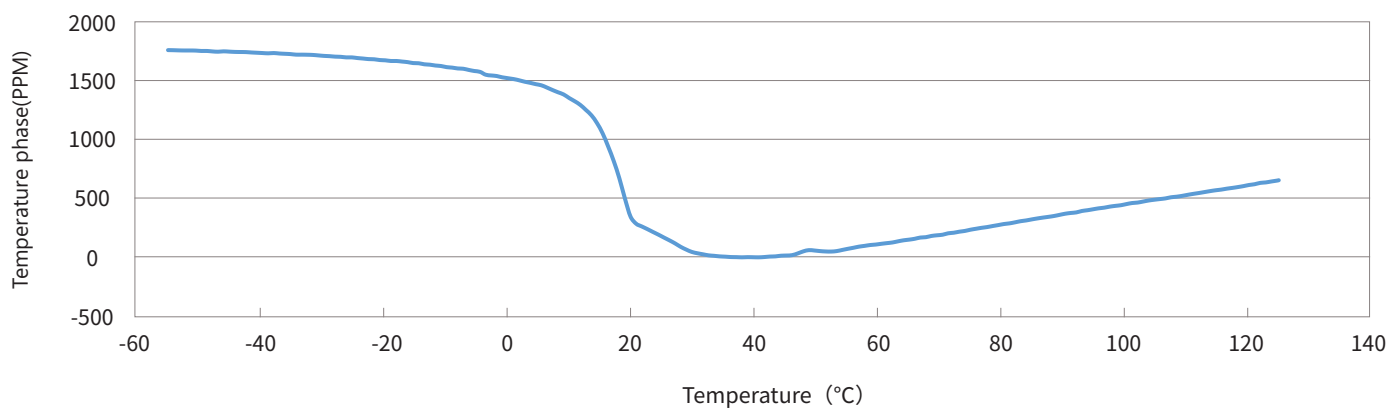


Note: nominal values at +25° C ambient temperature.



Note: average value at +40° C ambient temperature and sea level.

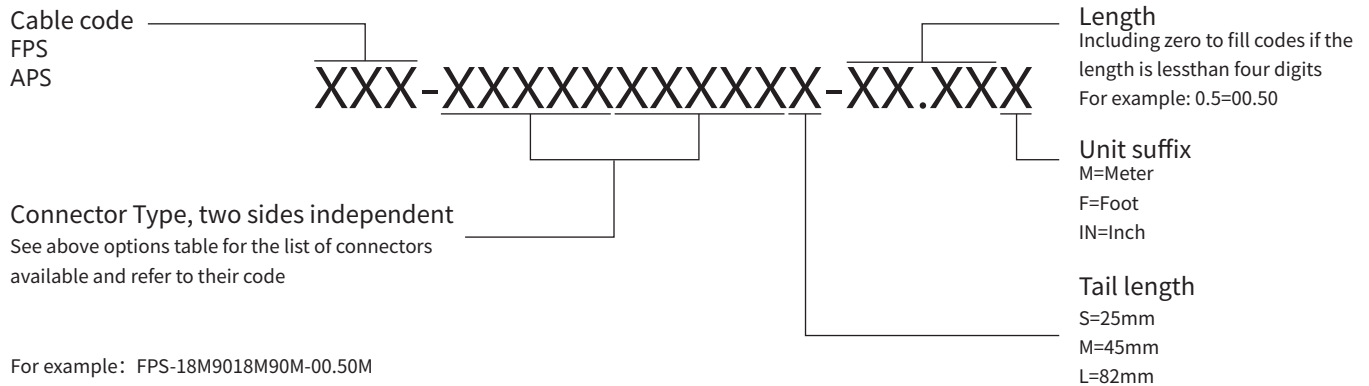
Phase change with Temp



Connectors Options

Type	Description	Code	FPS	APS	Operation Frequency (GHz)	Maximum VSWR
1.85mm	male straight	18M	●	●	67	1.35
	male 90°	18M90	●	●	67	1.40
	male 83°	VM83	●	●	67	1.40
	female	VF	●	●	67	1.35
2.4 mm	male straight	24M	●	●	50	1.30
	male 90°	24M90	●	●	50	1.35
	male 83°	24M83	●	●	50	1.35
	female	24F	●	●	50	1.30
2.92 mm	male straight	29M	●	●	40	1.25
	male 90°	29M90	●	●	40	1.30
	male 83°	29M83	●	●	40	1.30
	female	29F	●	●	40	1.25
3.5 mm	male straight	35M	●	●	26.5	1.20
	male 90°	35M90	●	●	26.5	1.25
	male 83°	35M83	●	●	26.5	1.25
	female	35F	●	●	26.5	1.20

Ordering Information



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