FABTest Connector and Assembly

Assembly Selection Information

A: Armored
NA: No

XXXXXX -XXXXXX-XX.XX X

Length
Add 0 if the length code is less than 4 bits
For example, 8=08.00

Length Unit Suffix
IN: Inch
M: Meter
F: Foot

Connector Type, Independent on Both Sides

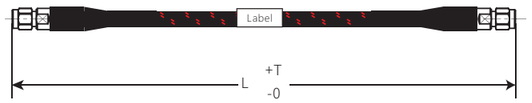
18F-1.85mm Female	35M-3,5mm Male
18M-1.85mm Male	SF-SMA Female
24F-2.4mm Female	SM-SMA Male
24M-2.4mm Male	SMR-SMA Male Right Angle
29F-2.92mm Female	NF-N Female
29M-2.92mm Male	NM-N Male
35F-3.5mm Female	

Cable
FTT
FTP
FTL
FTN
FTS

Stop Frequency
18GHz=18
26.5GHz=26
40GHz=40
50GHz=50
67GHz=67

Cable	Conector Code	Material of Body	Material of Cetner Pin	Operating Freq. (GHz)
FTT	SM	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTT	NM	Stainless Steel Passivated	Gold Plated BeCu	18GHz
FTL	24F	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTL	24M	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTL	29F	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTL	29M	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTL	35F	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTL	35M	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTL	NM	Stainless Steel Passivated	Gold Plated BeCu	18GHz
FTL	SF	Stainless Steel Passivated	Gold Plated BeCu	18GHz
FTL	SM	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTP	29M	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTP	35M	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTP	NM	Stainless Steel Passivated	Gold Plated BeCu	18GHz
FTP	SM	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTN	24F	Stainless Steel Passivated	Gold Plated BeCu	50GHz
FTN	24M	Stainless Steel Passivated	Gold Plated BeCu	50GHz

Cable	Conector Code	Material of Body	Material of Cetner Pin	Operating Freq. (GHz)
FTN	29F	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTN	29M	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTN	35F	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTN	35M	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTN	NM	Stainless Steel Passivated	Gold Plated BeCu	18GHz
FTN	SM	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTN	SMR	Stainless Steel Passivated	Gold Plated BeCu	18GHz
FTS	18F	Stainless Steel Passivated	Gold Plated BeCu	67GHz
FTS	18M	Stainless Steel Passivated	Gold Plated BeCu	67GHz
FTS	24F	Stainless Steel Passivated	Gold Plated BeCu	50GHz
FTS	24M	Stainless Steel Passivated	Gold Plated BeCu	50GHz
FTS	29F	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTS	29M	Stainless Steel Passivated	Gold Plated BeCu	40GHz
FTS	35M	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz
FTS	SF	Stainless Steel Passivated	Gold Plated BeCu	18GHz
FTS	SM	Stainless Steel Passivated	Gold Plated BeCu	26.5GHz



Label Requirement:
1. Cable Assembly Length: X≦1m，just one type label in middle.
2. Cable Assembly Length: X>1m，two type labels on both sides, and the text goes in the opposite direction.

For Example: P/N YYMMXXXX-XXX

Assembly Length Tolerance Standard:
1. L≦1m, tolerance is +10/-0mm.
2. L>1m, tolerance is +1%/-0mm.
3. X≦1m, tolerance of assembly whichwith phase, time delay and armored is +20/-0mm.
4. X>1m, tolerance of assembly whichwith phase, time delay and armored is +2%/-0mm.

Contact Us

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FABTest

Focusimple FABTest Microwave & Milli-meter Wave Solution Union

The popularization of broadband and millimeter wave frequency created new chance for the communication revolution. As a result, precise, efficient and reliable cable assembly becomes essential. FABTest solution is right here to solve your such problems on MW& MMW signal transmission! It provides various cable and connector options to support frequency up to 67GHz. Also armors are available to resist crushing, twisting and kinking. Comparing to standard test cables, FABTest assembly maintains all the critical features, including phase and amplitude stability. Therefore, it is cost-effective alternative to standard test cables.

Typical Applications

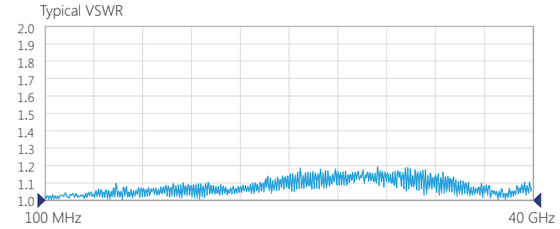
- Test & Measurement
- 5G communication
- Autopilot
- Vehicle
- Maritime systems
- System interconnection
- Semi-conductor R&D and production
- Big data processing center

Advantages

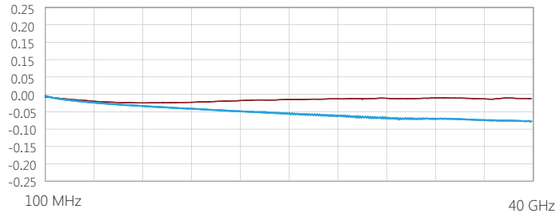
- High precision - rigorous manufacturing and quality control, guaranteed transmission precision;
- High reliability -reliable cable ensures the consistent of signal transmission;
- Ultra-low loss - unique structure brings extremely low insertion loss and great return loss;
- Optimized option - multi-option of connectors, plenty of stock, short delivery and long lifespan;
- Softer - softer cable and armor, more convenient installation.

Cable\Connector	FTT	FTP	FTL	FTN	FTS
18F					√
18M					√
24F			√	√	√
24M			√	√	√
29F			√	√	√
29M		√	√	√	√
35F			√	√	
35M		√	√	√	√
SF			√		√
SM	√	√	√	√	√
SMR				√	
NF			√		
NM	√	√	√	√	

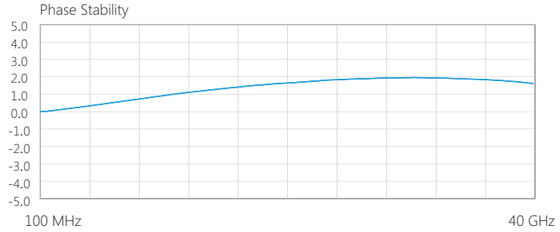
Typical VSWR



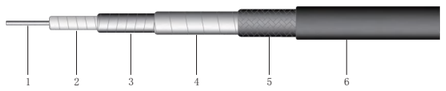
Amplitude Stability



Phase Stability



FABTest Cable Specifications



1	Center Conductor	SPC
2	Dielectric	PTFE
3	Outer Conductor	SPC Tape
4	Interlayer	PTFE
5	Outer Shield	SPC Wire
6	Jacket	FEP

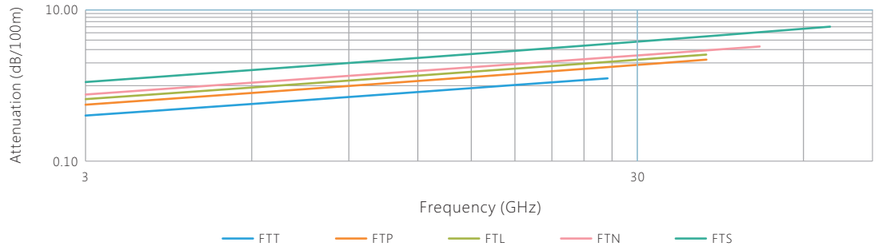
	FTT	FTP	FTL	FTN	FTS
Electrical Specifications					
Operating Frequency	26.5	40	40	50	67
Typical VSWR	1.2	1.22	1.23	1.25	1.25
Typical Amplitude Stability(°)	±4	±5	±5	±5	±6
Guaranteed Amplitude Stability(dB)	±0.04	±0.05	±0.05	±0.06	±0.06
Impedance	50	50	50	50	50
"Velocity of Propagation"	83%	82%	82%	74%	74%
Peak Power	5.5	2	2	2.5	0.5

1	Armored Spring	Stainless Steel Spring
2	Strengtnen Net	SPC Wire
3	Anti Twist Layer	Waterproof Glue
4	Armored Jacket	PTFE Wire

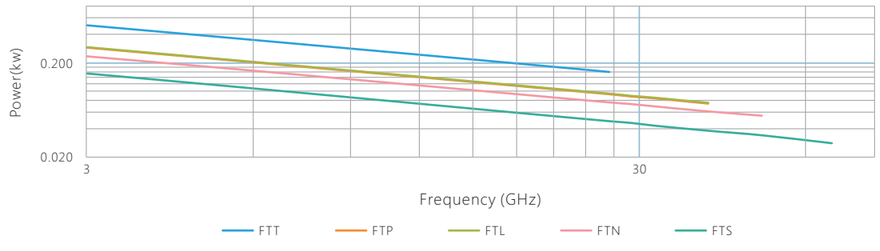
Physical & Mechanical Specifications															
Dimensions	mm		Inch	mm		Inch	mm		Inch	mm		Inch	mm		Inch
Center Conductor	Solid			Solid			Solid			Solid			Solid		
Outer Diameter of Cable	5.3		0.209	3.8		0.118	3.8		0.106	3.6		0.094	2.6		0.067
Outer Diameter of Armor	7.95		0.313	6		0.236	6		0.236	6		0.236	4.65		0.183
Minimum Bending Radius	30		1.062	21		0.709	21		0.709	21		0.55	12		0.43
Weight	63			32			35			34			20		
Temperature Range	-55℃/165℃(-67℉/329℉)														
Frequency(GHz)	dB/m	dB/Ft	kW	dB/m	dB/Ft	kW	dB/m	dB/Ft	kW	dB/m	dB/Ft	kW	dB/m	dB/Ft	kW
3	0.40	1.312	0.500	0.56	1.84	0.291	0.66	2.165	0.292	0.76	2.49	0.234	1.11	3.64	0.154
6	0.57	1.870	0.350	0.8	2.62	0.203	0.94	3.084	0.204	1.09	3.58	0.165	1.60	5.25	0.107
18	1.02	3.346	0.197	1.43	4.69	0.114	1.67	5.479	0.115	1.92	6.30	0.093	2.88	9.45	0.059
26.5	1.25	4.101	0.160	1.76	5.77	0.093	2.05	6.726	0.094	2.35	7.71	0.076	3.56	11.68	0.048
29				1.85	6.07	0.088	2.15	7.054	0.089	2.46	8.07	0.073	3.74	12.27	0.046
32				1.95	6.40	0.084	2.27	7.448	0.085	2.59	8.50	0.069	3.95	12.96	0.043
40				2.21	7.25	0.074	2.56	8.399	0.075	2.92	9.58	0.061	4.48	14.70	0.038
50										3.29	10.79	0.055	5.09	16.70	0.034
67													6.02	19.75	0.028
Attenuation at Frequency	K1*√FMhz+K2*FMHz														
K1	0.7156867			0.9915499			1.1684700			1.3707349			1.9500000		
K2	0.0003280			0.0005549			0.0005500			0.0004400			0.0014500		

FABTest Test Data

Frequency& Attenuation

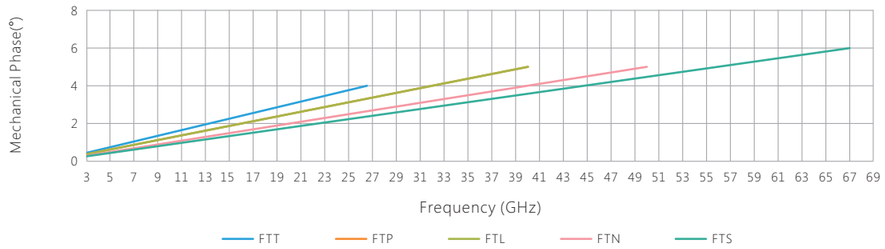


Frequency& Power



Typical Value of Mechanical Phase Stability

Rotate for one cycle along the minimum repeated bending diameter



Typical Value of Mechanical Amplitude Stability

Rotate for one cycle along the minimum repeated bending diameter