



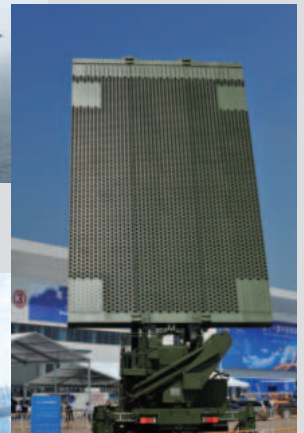
### Typical Applications

- \* Point-to-point interconnection between RF modules
- \* Interconnection between boards
- \* Cabinet internal jumper
- \* Flexible replacement for semi-rigid assemblies
- \* Radar and Electronic Warfare Systems

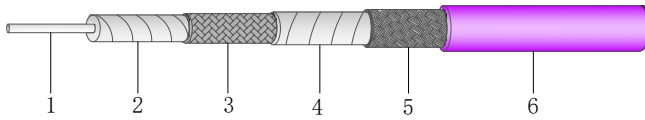
FSH-series products have excellent bending property, high cable retention and outstanding phase stability. FSH cable assembly can be bent from the root of connector to save installation space and is able to replace rectangular curved connector. The design of connector adopts welding-free technology, avoiding embrittlement and cracking on welding position between cable and connector, saving cost and weight. Compared with semi-rigid cable assembly, FSH can be bent flexibly according site applications, requiring no customized length and bending shape design, thus saves engineering resources and transportation expenses significantly, as well as reduces overall cost of use of the customer.

### Features & Benefits:

- \* Excellent bending phase, amplitude stability
- \* Stainless steel outer shield, high tensile strength
- \* Three-layer shielding structure, good insulation
- \* Stainless steel welding-free connector
- \* Bending at random and maintaining shape stability

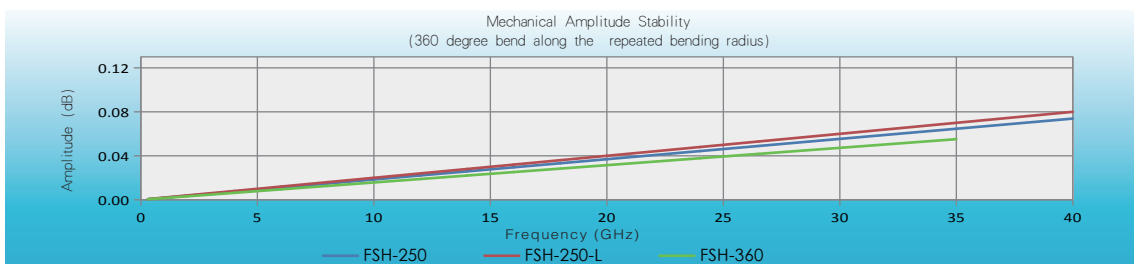
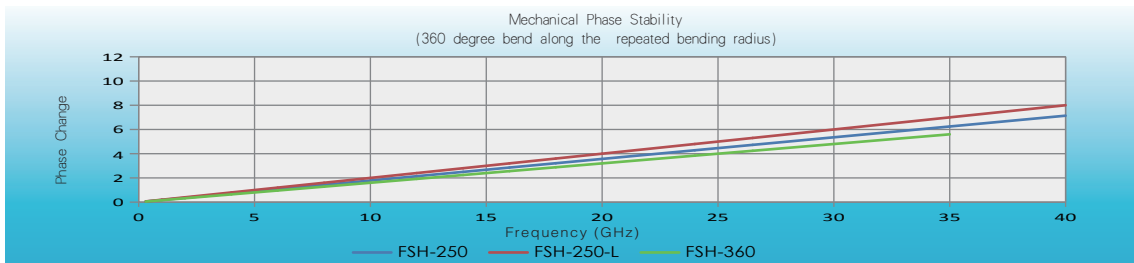
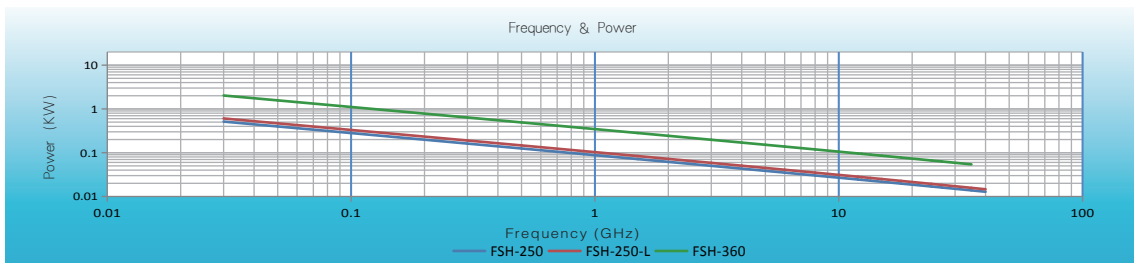
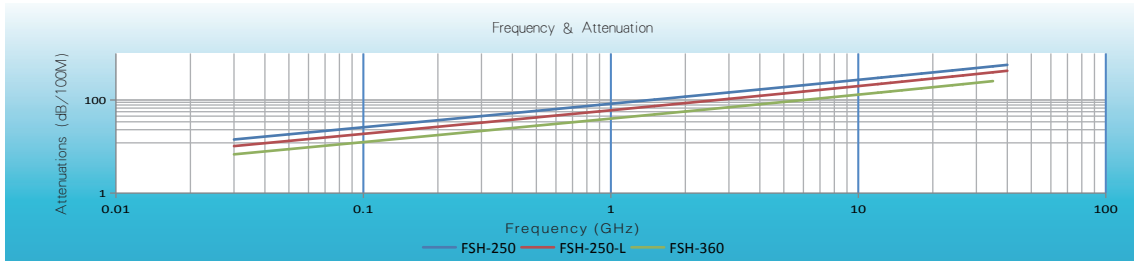


# FSH Specification



1. Center conductor,SPC
2. Dielectric, Solid/ND-PTFE
3. Outer conductor,SPC ribbon braid
4. Interlayer, PI/Al Tape
5. Outer shield, Stainless Wire
6. Jacket,Purple FEP

FSH-250			FSH-250-L			FSH-360			
<b>Physical &amp; Mechanical Specifications</b>									
Dimensions	mm	Inch	mm	Inch	mm	Inch	mm	Inch	
Center Conductor	0.51	0.020	0.51	0.020	0.91	0.036			
Dielectric	1.65	0.065	1.55	0.061	2.72	0.107			
Outer Conductor	1.82	0.072	1.71	0.067	2.79	0.110			
Interlayer	1.90	0.075	1.81	0.071	3.02	0.119			
Outer Shield	2.12	0.083	2.04	0.080	3.20	0.126			
Jacket	2.50	0.098	2.50	0.098	3.61	0.142			
Bend Radius, minimum	10	0.394	10	0.394	18	0.709			
Bend Radius, repeated	25	0.980	25	0.980	36	1.42			
Weight	18 g/m	.012 lbs/ft	16 g/m	.011 lbs/ft	31 g/m	.021 lbs/ft			
Temperature Range	T: -55° /200° C (-67° /392° F)								
<b>Electrical Specifications</b>									
Impedance	50 Ohms			50 Ohms			50 Ohms		
Velocity of Propagation	70%			74%			76%		
Dielectric Constant	2.04			1.83			1.73		
Shielding Effectiveness	> 90 dB			> 90 dB			> 90 dB		
Time Delay	4.76 nS/m	1.45 nS/Ft	4.50 nS/m	1.37 nS/Ft	4.38 nS/m	1.33 nS/Ft			
Capacitance	95.2 pF/m	29.0 pF/Ft	90.2 pF/m	27.5 pF/Ft	87.7 pF/m	26.7 pF/Ft			
Inductance	0.23 uH/m	0.070 uH/Ft	0.22 uH/m	0.068 uH/Ft	0.20 uH/m	0.059 uH/Ft			
Cutoff Frequency	61 GHz			68 GHz			39 GHz		
Voltage Withstand	1000 DC			900 DC			1500 DC		
Peak Power	2.5 kW			2.03 kW			5.6 kW		
Attenuation&Power Handling	Attenuation (+25° C Ambient) ; Power (+40° Ambient, Sea Level, VSWR 1:1)								
Frequency (MHz)	dB/100 m	dB/100 F	kW	dB/100 m	dB/100 F	kW	dB/100 m	dB/100 F	kW
30	14.17	4.32	0.605	10.23	3.12	0.606	8.79	2.68	1.569
50	18.31	5.58	0.468	13.22	4.03	0.469	12.45	3.79	1.108
100	25.94	7.91	0.331	18.73	5.71	0.331	21.64	6.60	0.637
300	45.09	13.75	0.190	32.61	9.94	0.190	28.01	8.54	0.492
500	58.36	17.79	0.147	42.24	12.88	0.147	37.73	11.50	0.365
900	78.59	23.96	0.109	56.97	17.37	0.109	39.80	12.13	0.346
1000	82.91	25.28	0.103	60.12	18.33	0.103	48.93	14.92	0.282
1500	101.90	31.07	0.084	73.99	22.56	0.084	56.67	17.28	0.243
2000	118.02	35.98	0.073	85.78	26.15	0.072	69.76	21.27	0.198
3000	145.26	44.29	0.059	105.78	32.25	0.059	80.90	24.67	0.170
4000	168.42	51.35	0.051	122.84	37.45	0.050	90.79	27.68	0.152
5000	188.99	57.62	0.045	138.02	42.08	0.045	99.80	30.43	0.138
6000	207.71	63.33	0.041	151.87	46.30	0.041	115.94	35.35	0.119
8000	241.23	73.55	0.036	176.76	53.89	0.035	130.31	39.73	0.106
10000	271.08	82.65	0.032	199.00	60.67	0.031	143.42	43.73	0.096
12000	298.31	90.95	0.029	219.35	66.88	0.028	145.92	44.49	0.094
12400	303.51	92.53	0.028	223.24	68.06	0.028	152.62	46.53	0.090
13500	317.41	96.77	0.027	233.66	71.24	0.027	161.38	49.20	0.085
15000	335.58	102.31	0.026	247.30	75.40	0.025	177.80	54.21	0.078
18000	369.65	112.70	0.023	272.95	83.21	0.023	188.09	57.34	0.073
20000	390.98	119.20	0.022	289.04	88.12	0.021	218.77	66.70	0.063
26500	454.58	138.59	0.019	337.24	102.82	0.018	254.37	77.55	0.054
35000	528.33	161.07	0.016	393.47	119.96	0.016			
40000	568.16	173.22	0.015	424.00	129.27	0.015			
Attenuation at Frequency	$dB/100 m = K1 * \sqrt{FMHz} + K2 * FMHz$								
K1	2.5808091			1.8600000			1.2380700		
K2	0.0013000			0.0013000			0.0006499		



### Assemblies order information

FSHXXX-XXXXXX-XX.XXX

Cable Size

- 250
- 250L
- 360

Connector Type, two sides independent

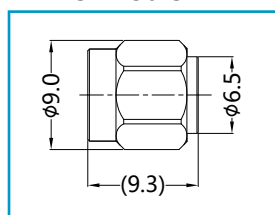
SM = SMA Male

**M: Metric system, meter**  
E.g.: -01.20M = 1.2meter

**F: Imperial Standard, Ft**  
E.g.: 07.50F = 7.5 Ft

### Connectors Information

TS-A250-SM-B



Type	Cable	Description	P/N	Materials	Attach Method
SMA-Male	FSH-250	TS-A250-SM-B	01-MS015	Brass plated Alballoy	Soldering inner contact crimp outer conductor

Note: Please contact FocuSimple if you have other connectors request.