



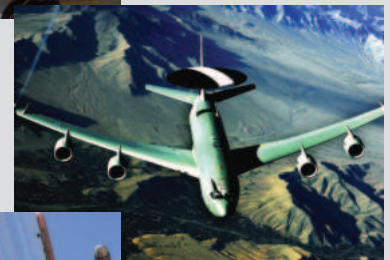
Typical Applications:

- * Military radar
- * Electronic warfare
- * Shipboard system
- * Airborne platform
- * System interconnection
- * Radio station

FSB series uses international leading low loss and stable RF cable techniques, low density PTFE dielectric, silver plated flat helicoil. This is the lowest loss structure among the flexible cables. This product can be widely used in military radar, phased array radar, electronic warfare, airborne equipment, etc, any other high requirement of loss and phased applications.

Features & Benefits:

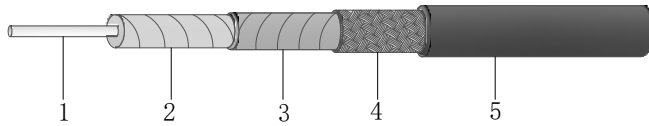
- * Good mechanical phase stability
- * Good temperature phase stability
- * Extremely low loss
- * Good amplitude stability
- * Good shield performance
- * Good bending performance
- * Good power handling capability



Similar cable substitution table

F+S	MCC	GORE	TIMES	IW	HAROUR	SEMFLEX
FSB-220		3506				
FSB-360	UFB142A	3507		1401		
FSB-500	UFB205A	3449	HF190	1801		
FSB-800	UFB311A	3450	HF290	2801	LLS290	LA290

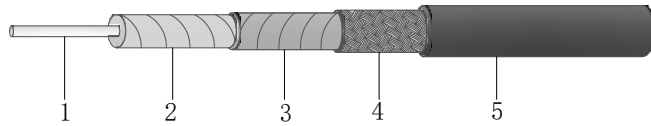
FSB Specification



1. Center conductor , Silver plated copper
2. Dielectric , LD-PTFE
3. Outer conductor , Silver plated copper tape wrapped
4. Outer shield , Silver-plated copper braid
5. Jacket , Grey FEP

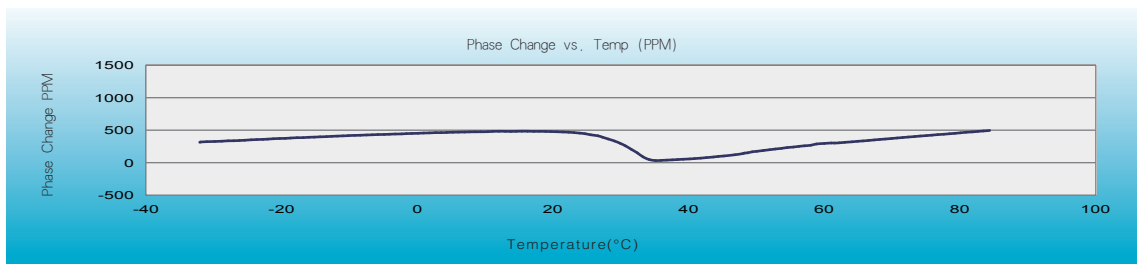
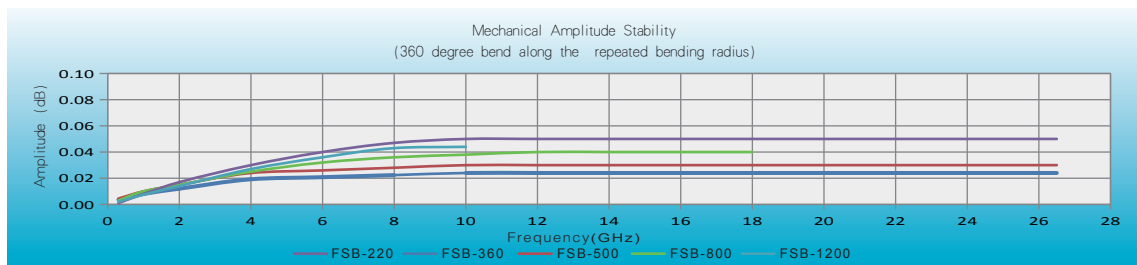
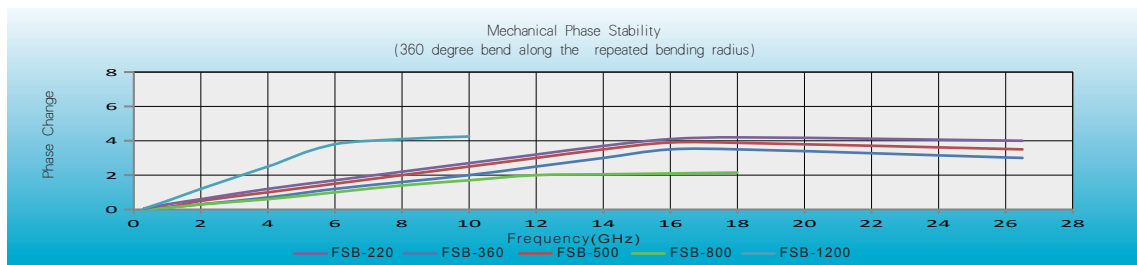
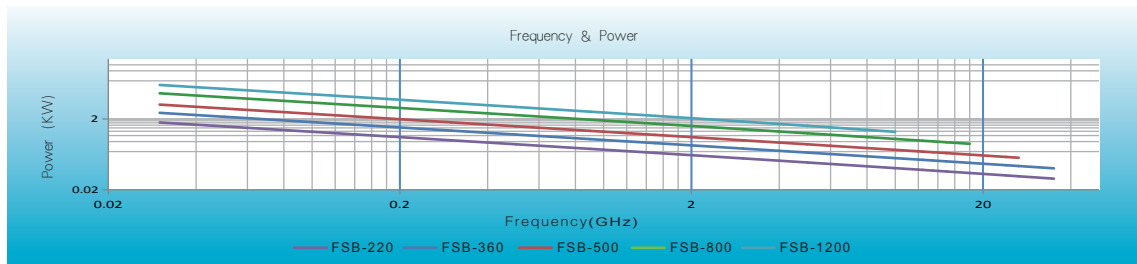
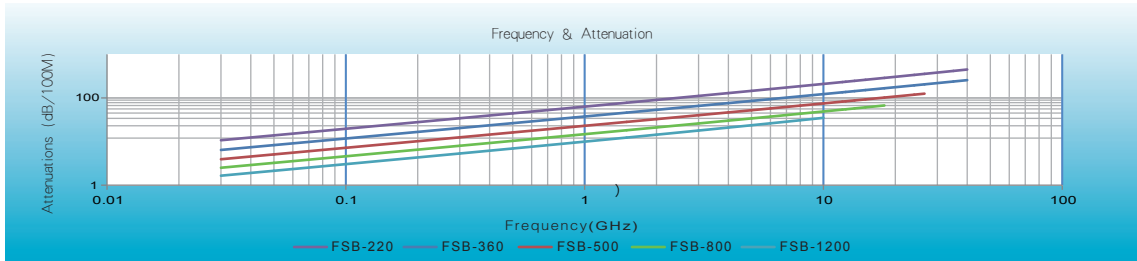
FSB-220		FSB-360		FSB-500		
Physical & Mechanical Specifications						
Dimensions	mm	Inch	mm	Inch	mm	Inch
Center Conductor	0.51	0.020	0.91	0.036	1.45	0.057
Dielectric	1.37	0.054	2.50	0.098	4.00	0.157
Outer Conductor	1.50	0.059	2.70	0.106	4.30	0.169
Outer Shield	1.81	0.071	3.20	0.126	4.76	0.187
Jacket	2.20	0.087	3.60	0.142	5.20	0.205
Bend Radius, minimum	15	0.591	18	0.709	20	0.787
Bend Radius, repeated	36	1.42	36	1.42	50	1.97
Weight	18 g/m	.012 lbs/ft	33 g/m	.022 lbs/ft	50 g/m	.034 lbs/f
Temperature Range	T: -55° /165° C (-67° /329° F)					
Electrical Specifications						
Impedance	50 Ohms		50 Ohms		50 Ohms	
Velocity of Propagation	82%		82%		83%	
Dielectric Constant	1.49		1.49		1.45	
Shielding Effectiveness	> 90 dB		> 90 dB		> 90 dB	
Time Delay	4.06 nS/m	1.24 nS/Ft	4.06 nS/m	1.24 nS/Ft	4.01nS/m	1.22 nS/Ft
Capacitance	81.4 pF/m	24.8 pF/Ft	81.4 pF/m	24.8 pF/Ft	80.3 pF/m	24.5 pF/Ft
Inductance	0.20 uH/m	0.062uH/Ft	0.19uH/m	0.058 uH/Ft	0.18 uH/m	0.056uH/Ft
Cutoff Frequency	83 GHz		46 GHz		29 GHz	
Voltage Withstand	500 DC		900 DC		1500 DC	
Peak Power	0.63 kW		2.0 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 Ft	kW	dB/100 m	dB/100 Ft	kW
30	10.72	3.27	1.595	6.42	1.96	2.989
50	13.86	4.23	1.234	8.29	2.53	2.314
100	19.65	5.99	0.871	11.74	3.58	1.634
300	34.21	10.43	0.500	20.40	6.22	0.940
500	44.33	13.51	0.386	26.40	8.05	0.726
900	59.81	18.23	0.286	35.55	10.84	0.540
1000	63.11	19.24	0.271	37.50	11.43	0.511
1500	77.70	23.69	0.220	46.08	14.05	0.416
2000	90.11	27.47	0.190	53.36	16.27	0.359
3000	111.16	33.89	0.154	65.65	20.02	0.292
4000	129.13	39.37	0.132	76.10	23.20	0.252
5000	145.14	44.25	0.118	85.37	26.03	0.225
6000	159.75	48.70	0.107	93.81	28.60	0.204
8000	186.01	56.71	0.092	108.91	33.20	0.176
10000	209.50	63.87	0.082	122.35	37.30	0.157
12000	231.01	70.43	0.074	134.60	41.04	0.142
12400	235.12	71.68	0.073	136.94	41.75	0.140
13500	246.14	75.04	0.069	143.19	43.66	0.134
15000	260.58	79.44	0.066	151.36	46.15	0.127
18000	287.72	87.72	0.059	166.67	50.81	0.115
24000	336.89	102.71	0.051	194.22	59.21	0.099
26500	355.86	108.49	0.048	204.79	62.44	0.094
40000	448.00	136.59	0.038	255.69	77.96	0.075
Attenuation at Frequency	dB/100 m=K1*sqrt(FMHz)+K2*FMHz					
K1	1.9500000		1.1684700		0.7156867	
K2	0.0014500		0.0005500		0.0003280	

FSB Specification



1. Center conductor , Silver plated copper
2. Dielectric , LD-PTFE
3. Outer conductor , Silver plated copper tape wrapped
4. Outer shield , Silver-plated copper braid
5. Jacket , Grey FEP

FSB-800			FSB-1200		
Physical & Mechanical Specifications					
Dimensions	mm		Inch		
Center Conductor	2.30	0.091	3.80	0.150	
Dielectric	6.25	0.246	10.40	0.409	
Outer Conductor	6.57	0.259	10.78	0.424	
Outer Shield	7.15	0.281	11.35	0.447	
Jacket	7.80	0.307	12.00	0.472	
Bend Radius, minimum	35	1.378	60	2.362	
Bend Radius, repeated	80	3.15	110	4.33	
Weight	130 g/m	.087 lbs/ft	280 g/m	0.188 lbs/ft	
Temperature Range	T: -55° /165° C (-67° /329° F)				
Electrical Specifications					
Impedance	50 Ohms		50 Ohms		
Velocity of Propagation	83%		83%		
Dielectric Constant	1.45		1.45		
Shielding Effectiveness	> 90 dB		> 90 dB		
Time Delay	4.01 nS/m	1.22 nS/Ft	4.01 nS/m	1.22 nS/Ft	
Capacitance	80.3 pF/m	24.5 pF/Ft	80.3 pF/m	24.5 pF/Ft	
Inductance	0.17 uH/m	0.053 uH/Ft	0.17 uH/m	0.053 uH/Ft	
Cutoff Frequency	18 GHz		11 GHz		
Voltage Withstand	3600 DC		5000 DC		
Peak Power	32.4 kW		62.5 kW		
Attenuation&Power Handling	Attenuation (+25° C Ambient) ; Power (+40° Ambient, Sea Level, VSWR 1:1)				
Frequency (MHz)	dB/100 m	dB/100 Ft	kW	dB/100 m	dB/100 Ft
30	2.51	0.77	10.655	1.65	0.50
50	3.24	0.99	8.244	2.14	0.65
100	4.60	1.40	5.817	3.04	0.93
300	8.00	2.44	3.341	5.32	1.62
500	10.37	3.16	2.579	6.93	2.11
900	13.99	4.26	1.912	9.41	2.87
1000	14.76	4.50	1.812	9.95	3.03
1500	18.17	5.54	1.472	12.33	3.76
2000	21.07	6.42	1.269	14.37	4.38
3000	25.98	7.92	1.029	17.88	5.45
4000	30.18	9.20	0.886	20.92	6.38
5000	33.91	10.34	0.789	23.66	7.21
6000	37.32	11.38	0.717	26.18	7.98
8000	43.44	13.25	0.615	30.78	9.38
10000	48.92	14.91	0.547	34.95	10.66
12000	53.93	16.44	0.496		
12400	54.89	16.73	0.487		
13500	57.45	17.52	0.465		
15000	60.81	18.54	0.440		
18000	67.13	20.47	0.398		
Attenuation at Frequency	dB/100 m=K1*sqrt(FMHz)+K2*FMHz				
K1	0.4563799		0.2985150		
K2	0.0003280		0.0005100		



Assemblies order information

FSBXXX-XXXXXX-XX.XXX

Cable Size

- 360
- 500
- 800

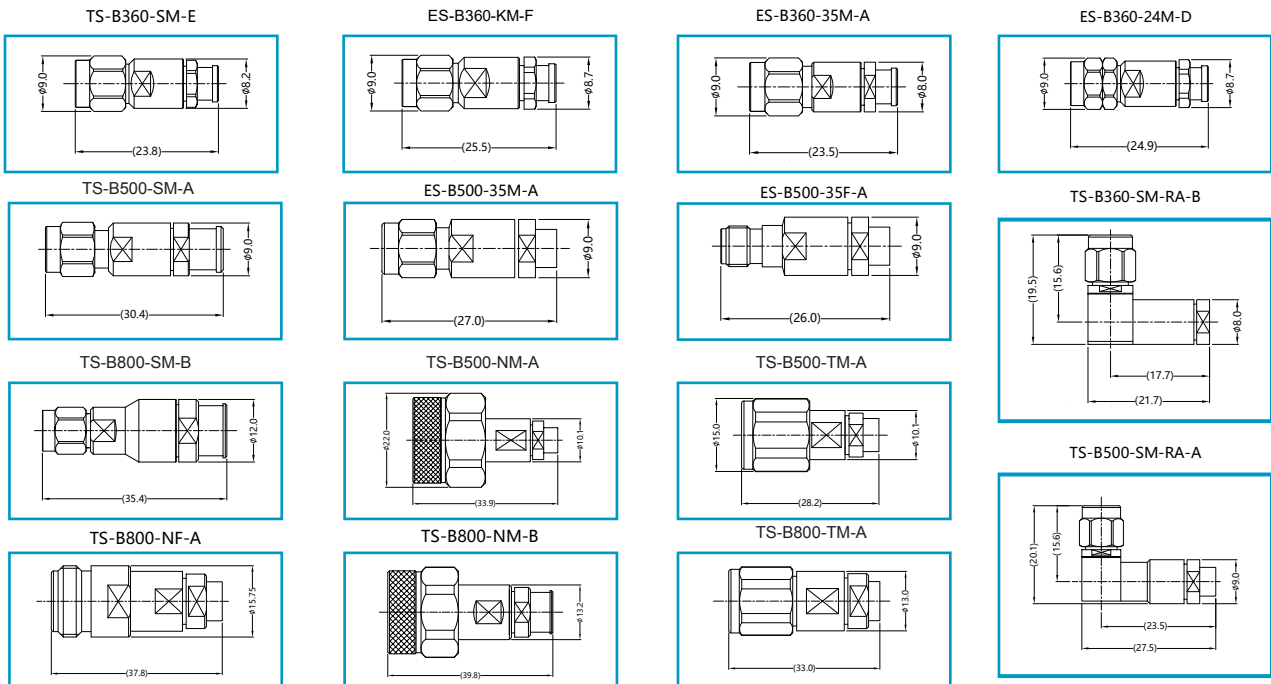
M: Metric system, meter
E.g.: -01.20M = 1.2meter

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

Connector Type, two sides independent

- 24M = 2.4mm Male
- 35M = 3.5mm Male
- 35F = 3.5mm Female
- KM = 2.92mm Male
- SM = SMA Male
- TM = TNC Male
- NM = Type N Male
- NF = Type N Female

Connectors Information



Type	Cable	Description	P/N	Materials	Attach Method
SMA-Male	FSB-360	TS-B360-SM-E	01-MS028	Stainless Steel	Soldering inner/outer conductor
SMA-Male-RA	FSB-360	TS-B360-SM-RA-B	01-MR010	Stainless Steel	Soldering inner/outer conductor
SMA-Male	FSB-500	TS-B500-SM-A	01-MS029	Stainless Steel	Soldering inner/outer conductor
SMA-Male-RA	FSB-500	TS-B500-SM-RA-A	01-MR012	Stainless Steel	Soldering inner/outer conductor
SMA-Male	FSB-800	TS-B800-SM-B	01-MS035	Stainless Steel	Soldering inner/outer conductor
3.5-Male	FSB-360	ES-B360-35M-A	03-MS007	Stainless Steel	Spring Finger inner contact Soldering outer conductor
3.5-Male	FSB-500	ES-B500-35M-A	03-MS008	Stainless Steel	Spring Finger inner contact Soldering outer conductor
3.5-Female	FSB-500	ES-B500-35F-A	03-FS003	Stainless Steel	Spring Finger inner contact Soldering outer conductor
2.92-Male	FSB-360	ES-B360-KM-F	04-MS023	Stainless Steel	Spring Finger inner contact Soldering outer conductor
2.4-Male	FSB-360	ES-B360-24M-D	05-MS012	Stainless Steel	Spring Finger inner contact Soldering outer conductor
N-Male	FSB-500	TS-B500-NM-A	02-MS022	Stainless Steel	Soldering inner/outer conductor
N-Male	FSB-800	TS-B800-NM-B	02-MS029	Stainless Steel	Soldering inner/outer conductor
N-Female	FSB-800	TS-B800-NF-A	02-FS006	Stainless Steel	Soldering inner/outer conductor
TNC-Male	FSB-500	TS-B500-TM-A	09-MS006	Stainless Steel	Soldering inner/outer conductor
TNC-Male	FSB-800	TS-B800-TM-A	09-MS008	Stainless Steel	Soldering inner/outer conductor

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