

FSB | High Performance Ultra-Low Loss Phase Stable Coax Cable



Product features

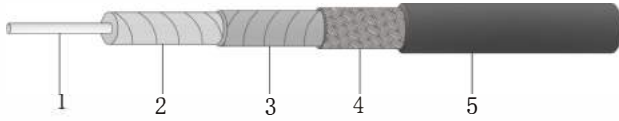
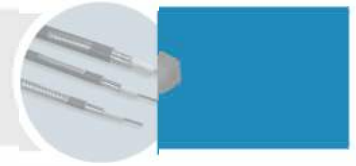
- Meets MIL-C-17
- Ultra-low loss
- Excellent mechanical and temp phase stability
- Excellent amplitude stability
- Light weight

The FSB cable series comprehensively provides higher performance than typical low loss and phase stable cables with wide applications.

Similar Cable Replacement Table

	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

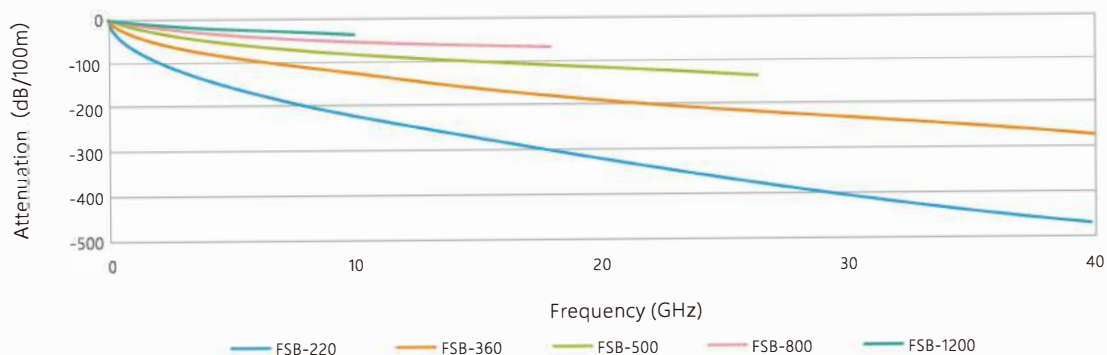


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|---|------------------|----------|---|--------------|----------|
| 1 | Center Conductor | SPC | 4 | Outer Shield | SPC Wire |
| 2 | Dielectric | PTFE | 5 | Jacket | FEP |
| 3 | Outer Conductor | SPC Tape | | | |

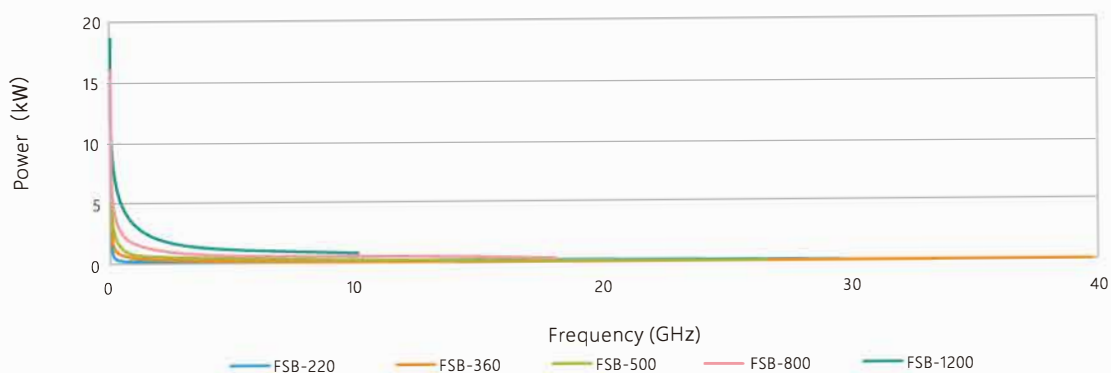
	FSB-220			FSB-360			FSB-500			FSB-800			FSB-1200		
Physical & Mechanical Specifications															
Dimensions	mm	Inch		mm	Inch		mm	Inch		mm	Inch		mm	Inch	
Jacket	2.20	0.087		3.60	0.142		5.20	0.205		7.80	0.307		12.00	0.472	
Bend Radius: Installation	15.0	0.591		18.0	0.709		20.0	0.787		35.0	1.378		60.0	2.362	
Bend Radius: Repeated	22.0	0.866		36.0	1.417		50.0	1.969		80.0	3.150		110.0	4.331	
Weight	14 g/m	0.009 lbs/ft		33 g/m	0.022 lbs/ft		63 g/m	0.042 lbs/ft		130 g/m	0.087 lbs/ft		280 g/m	0.188 lbs/ft	
Temperature Range	-55~+165°C (-67~+329°F)														
Electrical Specifications															
Operating Frequency	40 GHz			40 GHz			26.5 GHz			18 GHz			10 GHz		
Max Phase Stability(±°)	±10			±8			±5			±5			±5		
MaxAmplitudeStability(±dB)	±0.15			±0.15			±0.10			±0.10			±0.05		
Impedance	50Ω														
Shielding Effectiveness	> 90 dB														
Velocity of Propagation	82%			82%			83%			83%			83%		
Attenuation & Power Handling	Attenuation (+25°C Ambient) & Power Handling(+40°C Ambient; Sea Level; VSWR1:1)														
Frequency (MHZ)	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
1000	0.631	0.192	0.271	0.375	0.114	0.511	0.230	0.070	0.875	0.148	0.045	1.812	0.099	0.030	3.045
2000	0.901	0.275	0.190	0.534	0.163	0.359	0.327	0.100	0.615	0.211	0.064	1.269	0.144	0.044	2.108
4000	1.291	0.394	0.132	0.761	0.232	0.252	0.466	0.142	0.431	0.302	0.092	0.886	0.209	0.064	1.448
8000	1.860	0.567	0.092	1.089	0.332	0.176	0.666	0.203	0.301	0.434	0.132	0.615	0.308	0.094	0.984
10000	2.095	0.639	0.082	1.223	0.373	0.157	0.748	0.228	0.268	0.489	0.149	0.547	0.350	0.107	0.867
18000	2.877	0.877	0.059	1.667	0.508	0.115	1.019	0.311	0.197	0.671	0.205	0.398			
26500	3.559	1.085	0.048	2.048	0.624	0.094	1.252	0.382	0.160						
40000	4.480	1.366	0.038	2.557	0.780	0.075									
Attenuation at Frequency	dB/m= $\frac{K1*\sqrt{F\text{MHz}}+K2*F\text{MHz}}{100}$														
K1	1.9500000			1.1684700			0.7156867			0.4563799			0.2985150		
K2	0.0014500			0.0005500			0.0003280			0.0003280			0.0005100		



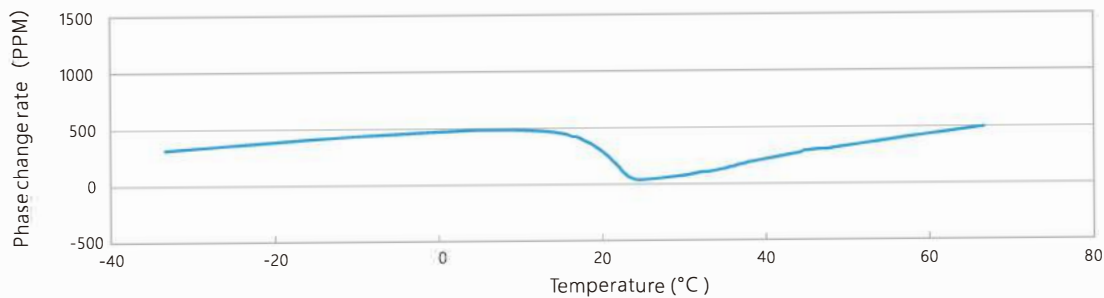
Frequency & Attenuation



Frequency & Power

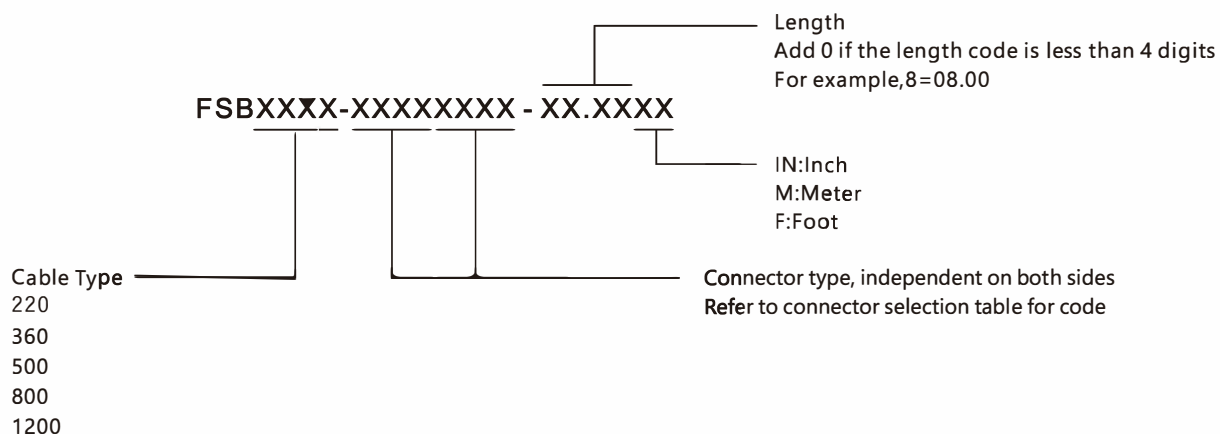


Temperature Phase (PPM)





Assembly Selection Information



For example: FSB360-29M29M-01.00M

Optional Connectors

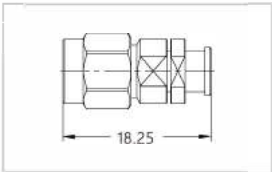
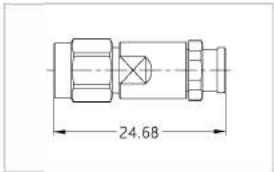
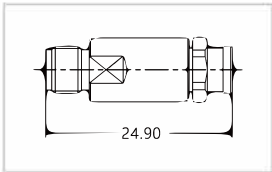
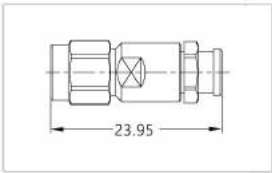
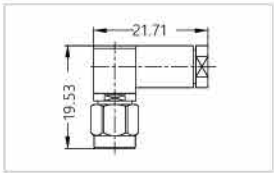
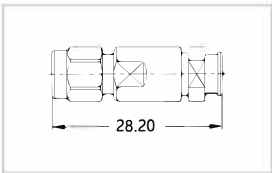
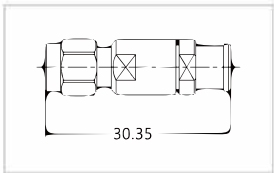
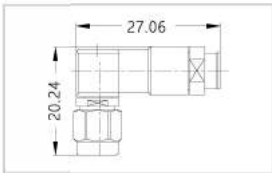
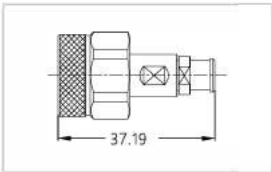
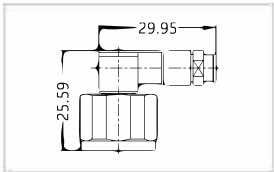
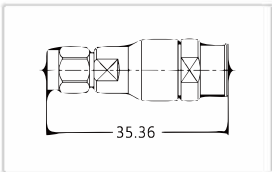
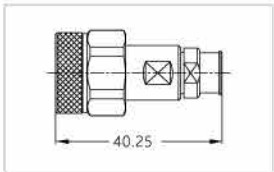
Connector Code	Connection Type	Operating Frequency (GHz)	FSB-220	FSB-360	FSB-500	FSB-800	FSB-1200	Typical VSWR	Max VSWR
24M	2.4mm Male	50GHz		○				1.30	1.35
24F	2.4mm Female	50GHz		○				1.30	1.35
29M	2.92mm Male	40GHz		●				1.25	1.30
29F	2.92mm Female	40GHz		●				1.25	1.30
35M	3.5mm Male	26.5GHz		○	●			1.25	1.30
35F	3.5mm Female	26.5GHz			○			1.25	1.30
SM	SMA Male	26.5GHz	●	●	●			1.25	1.30
		18GHz				●		1.25	1.30
SMR	SMA Male Right Angle	18GHz			●	○		1.30	1.35
		12GHz	○	●				1.30	1.35
SF	SMA Female	18GHz	○	○		○		1.25	1.30
NM	N Male	18GHz			●	●		1.25	1.30
		10GHz					○	1.30	1.35
NMR	N Male Right Angle	12GHz			●			1.30	1.35
NF	N Female	18GHz			○	○		1.30	1.35
TM	TNC Male	18GHz			○	○		1.30	1.35
SCM	SC Male	10GHz					○	1.30	1.35
716M	7/16 Male	7.5GHz					○	1.30	1.35

Note:

● = stocked and ○ = designed but not stocked.



Connector drawing

FSB-220	SMA Male for FSB-220 	2.92mm Male for FSB-360 	2.92mm Female for FSB-360 
	SMA Male for FSB-360 	SMA Male R/A for FSB-360 	
FSB-500	3.5mm Male for FSB-500 	SMA Male for FSB-500 	SMA Male R/A for FSB-500 
	N Male for FSB-500 	N Male R/A for FSB-500 	
FSB-800	SMA Male for FSB-800 	N Male for FSB-800 	

Disclaimer: The product information provided in this manual is for reference only, and the details shall be subject to the actual situation of the product.