FSA | High Performance Low Loss Flexible Coax Cable

Product features

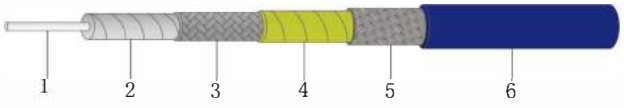
- Meets MIL-C-17
- High phase and attenuation stability vs bending
- Good bending performance
- Low loss
- High power handling
- Robust structure
- Long service life

FSA series cable provides an economical solution for applications requiring high strength and resistance to bending, turning and crushing. It offers low loss, high power handling, reliability,resistance to harsh environments, durability, and long life.

Similar Cable Replacement Table

	TIMES	ASTROLAB	SEMFLEX	MCC	H+S
FSA-460	SFT-142	32022	HP160S	UFA147A	SF-102
FSA-520	SFT-205	32055	HP190S	UFA205A	SF-104
FSA-630	SFT-304	32051	HP305S		

FSA | Specification

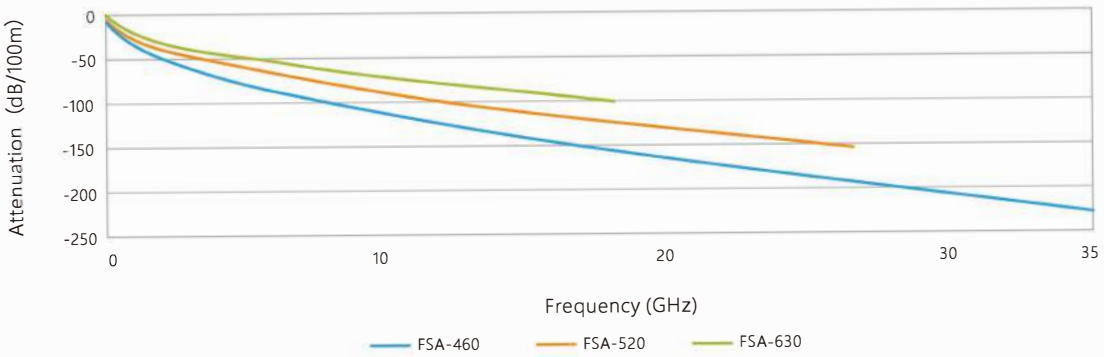


1	Center Conductor	SPC	4	Interlayer	High Temperature Aluminum Foil
2	Dielectric	PTFE	5	Outer Shield	SPC Wire
3	Dielectric	SPC Tape	6	Jacket	FEP

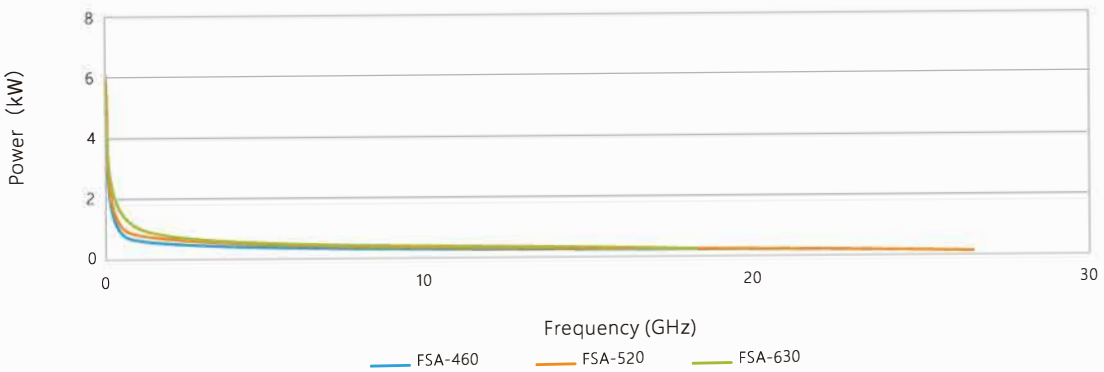
	FSA-460			FSA-520			FSA-630		
Physical & Mechanical Specifications									
Dimensions	mm	Inch		mm	Inch		mm	Inch	
Jacket	4.50	0.177		5.20	0.205		6.00	0.236	
Bend Radius: Installation	20	0.787		25	0.984		32	1.260	
Bend Radius: Repeated	46	1.811		52	2.047		63	2.480	
Weight	50 g/m	0.034 lbs/ft		60 g/m	0.040 lbs/ft		90 g/m	0.060 lbs/ft	
Temperature Range	-55~+200℃ (-67~+392°F)								
Electrical Specifications									
Operating Frequency	26.5 GHz			26.5 GHz			18 GHz		
Max Phase Stability(±°)	±8			±10			±10		
Max Amplitude Stability (±dB)	±0.15			±0.10			±0.10		
Impedance	50 Ω								
Shielding Effectiveness	> 100 dB								
Velocity of Propagation	76%								
Attenuation & Power Handling	Attenuation (+25°C Ambient) & Power Handing(+40°C Ambient; Sea Level; VSWR1:1)								
Frequency (MHZ)	dB/m	dB/ft	kW	dB/m	dB/ft	kW	dB/m	dB/ft	kW
1000	0.354	0.108	0.569	0.277	0.084	0.726	0.222	0.068	1.024
2000	0.504	0.154	0.400	0.395	0.120	0.509	0.317	0.097	0.716
4000	0.719	0.219	0.280	0.565	0.172	0.355	0.455	0.139	0.499
8000	1.032	0.315	0.195	0.813	0.248	0.247	0.658	0.201	0.345
10000	1.160	0.354	0.174	0.915	0.279	0.219	0.742	0.226	0.306
18000	1.583	0.483	0.127	1.255	0.383	0.160	1.022	0.312	0.222
26500	1.949	0.594	0.103	1.550	0.473	0.130			
Attenuation at Frequency	$dB/m=\frac{K1*\sqrt{FMHz}+K2*FMHz}{100}$								
K1	1.0994853			0.8562336			0.6827428		
K2	0.0006019			0.0005906			0.0005906		

FSA | Test Data

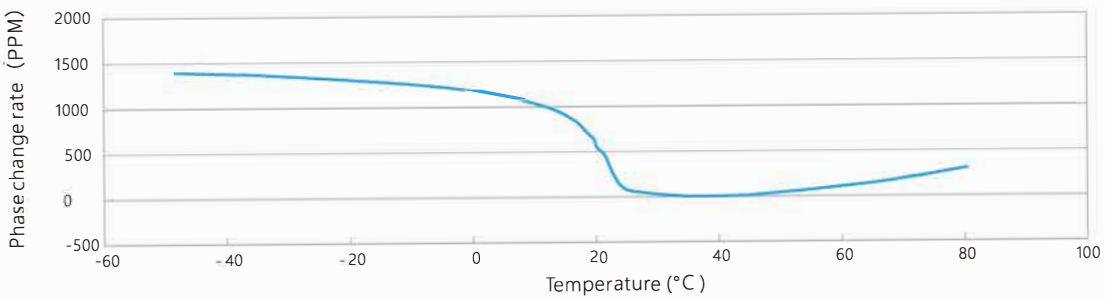
Frequency & Attenuation



Frequency & Power



Temperature Phase (PPM)



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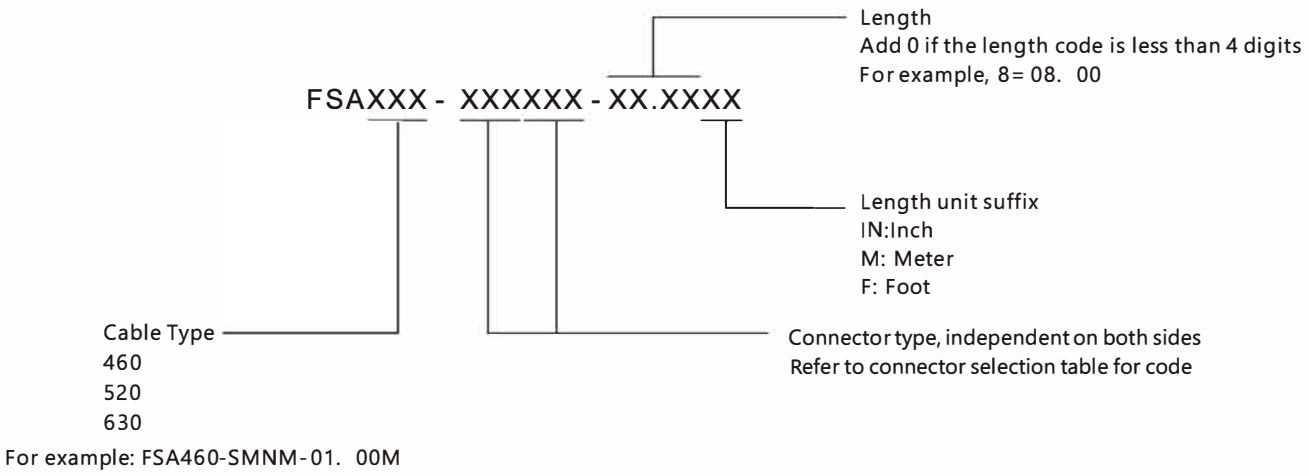
Assembly Selection Information



For example: FSA460-SMNM-01. 00M

Optional Connectors

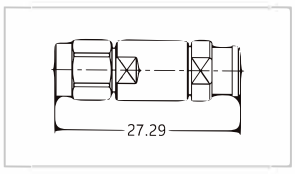
Connector Code	Connection Type	Operating Frequency(GHz)	FSA-460	FSA-520	FSA-630	Typical VSWR	Max VSWR
35M	3.5mm Male	26.5GHz	○			1.25	1.30
SM	SMA Male	26.5GHz	●	●		1.25	1.30
		18GHz			○	1.25	1.30
SMR	SMA Male Right Angle	26.5GHz	○			1.30	1.35
NM	N Male	18GHz	●	●	●	1.25	1.30
NMR	N Male Right Angle	18GHz	○			1.30	1.35
NF	N Female	18GHz	○		○	1.30	1.35
TM	TNC Male	18GHz	○	○	●	1.25	1.30

Note:
● = stocked and ○ = designed but not stocked.

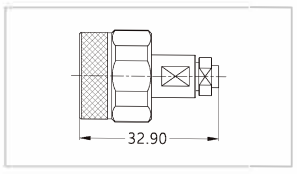
Connector drawing

FSA460

SMA Male for FSA-460

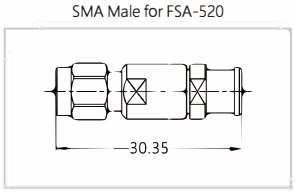


N Male for FSA-460

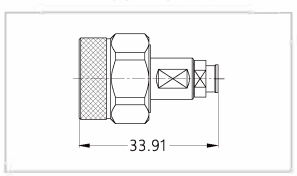


FSA520

SMA Male for FSA-520

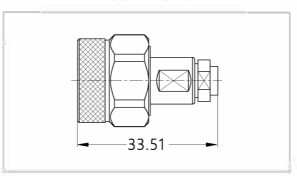


N Male for FSA-520



FSA630

N Male for FSA-630



TNC Male for FSA-630