

Flexible Ultra Low Loss Coax Cable Assembly

A81/SMA Female/SMA Female/DC-18 GHz

Model: A81-SMAFSMAF-L



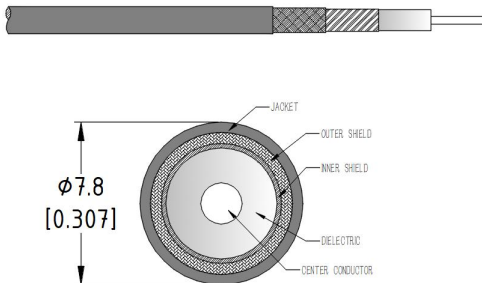
Features:

- Max Frequency 18 GHz
- VSWR max of 1.30
- Velocity of Propagation of 83%

Applications:

- Test & Measurement equipment
- Manufacturing lab
- WAN system equipment

Cable Cross Section:



Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR		1.25	1.3	:1
Velocity of propagation		83%		
Shielding Effectiveness	90			dB
Capacitance			80	pF/m
Phase Stability Vs. Flexure@18GHz		±2		°
Amplitude Stability Vs. Flexure@18GHz		±0.03		dB
Phase Stability Vs. Temperature			550	PPM

Envrionmental And Physical Characteristics:

Description	Parameter	Units
Cable Diameter	7.8	mm
Cable Jacket	FEP	
Min. Bending Radius	26	mm
Typical Flex life	50000	
Operating Temperature	-55 to +125	°C
Storage Temperature	-55 to +165	°C

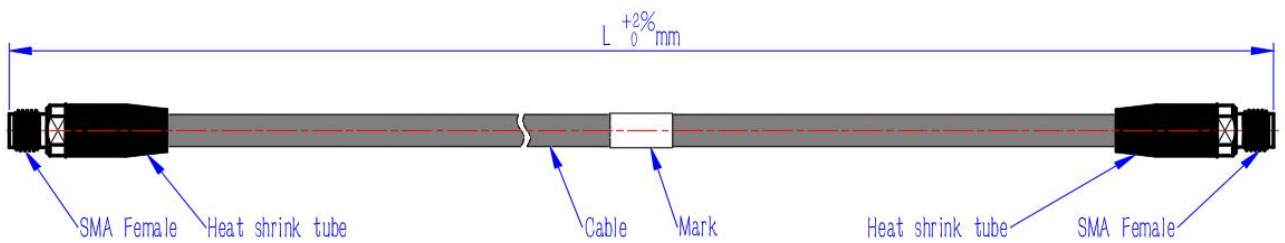
Cable Performance By Frequency

Frequency	2 GHz	4 GHz	6 GHz	8 GHz	12 GHz	16 GHz	18 GHz
Insertion Loss (dB/m Max)	0.21	0.30	0.37	0.43	0.54	0.63	0.67
RF Power CW (W Max.)	1296	905	732	558	506	434	407

Connectors:

Description	Connector 1	Connector 2
Type	SMA Straight Female	SMA Straight Female
Contact Material And Plating	Brass,Gold	Brass,Gold
Dielectric Type	PTFE	PTFE
Body Material And Plating	Passivated Stainless Steel	Passivated Stainless Steel
Insertion Loss (dB Max)	$0.05 * \sqrt{f_GHz}$	$0.05 * \sqrt{f_GHz}$

Outline Drawing:



Ordering Information:

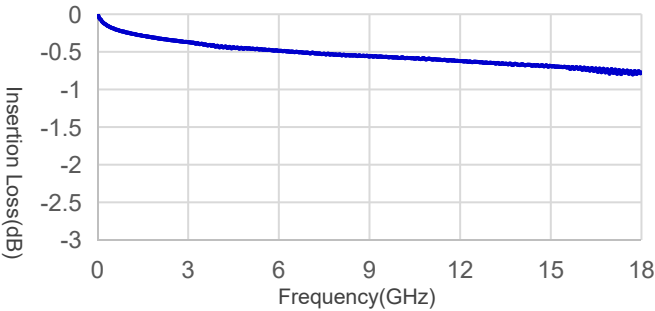
Base Number	Lenth	Armour (optional)		Phase/delay Matched (optional)
A81-SMAFSMAF	-L	-A (Black nylon woven armor)		
		-AP (PUR water proof armor)		-XXPS ($\leq \pm XX$ PS)
		-AS (Stainless steel armor)		-XX° ($\pm XX^\circ$)
		-AT (Transparent armor)		

Typical Performance Data:

Model:A81-SMAFSMAF-1m

Frequency	2 GHz		6 GHz		8 GHz		12 GHz		18 GHz	
	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max
Insertion Loss (dB)	0.28	0.35	0.50	0.62	0.58	0.72	0.71	0.8	0.80	0.9
VSWR	1.05	1.1	1.08	1.15	1.15	1.2	1.2	1.3	1.25	1.3

A81-SMAMFSMAF-1m
Insertion Loss



A81-SMAFSMAF-1m
Return Loss

