



FEATURES

- Flat response
- Excellent VSWR
- Passivated stainless steel
- Four hole flange mount



Generic photo used for illustration purposes only

Model No.	SF50-SF50+
Case Style	DJ1821
Connectors	SMA Female to SMA Female

+RoHS Compliant

The +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

APPLICATIONS

- Interconnection of RF cables
- Instrumentation

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		18	GHz
Insertion Loss	DC - 18	—	0.1	—	dB
VSWR	DC - 8	—	—	1.15	:1
	DC - 12.4	—	—	1.15	
	DC - 18	—	—	1.15	

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to 100°C
Storage Temperature	-55°C to 100°C

Permanent damage may occur if any of these limits are exceeded.



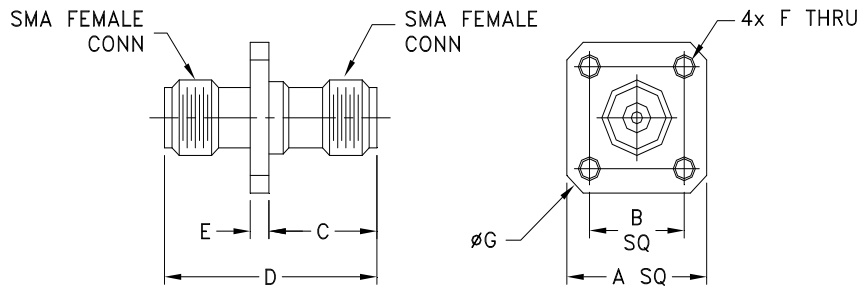
COAXIAL

Adapter

SFFL-SF50+

50 Ω DC to 18 GHz SMA-Female Flange to SMA-Female

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch mm)

A	B	C	D	E	F	G	wt
.50	.339	.39	.76	.07	(M2X0.4P)	.63	grams
12.7	8.6	9.9	19.3	1.78		16.0	3.6



COAXIAL

Adapter

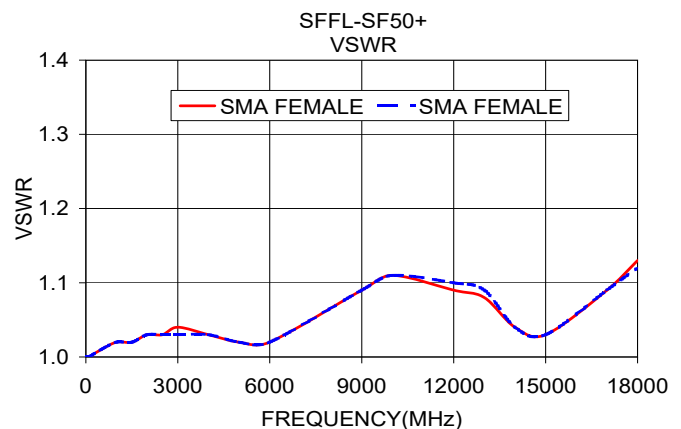
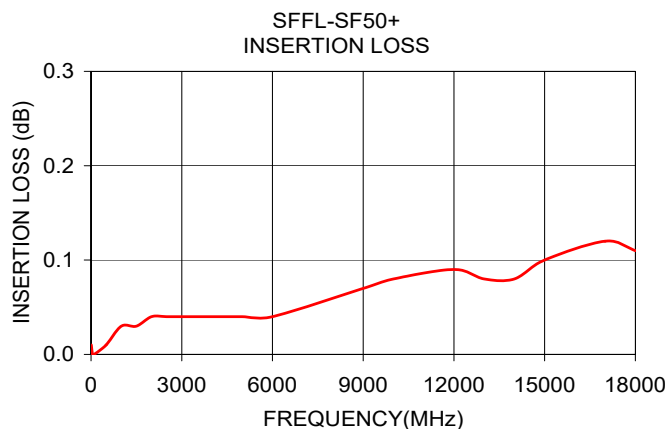
SFFL-SF50+

Mini-Circuits

50Ω DC to 18 GHz SMA-Female Flange to SMA-Female

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		SMA-FEM	SMA-FEM
10	0.01	1.00	1.00
50	0.00	1.00	1.00
100	0.00	1.00	1.00
500	0.01	1.01	1.01
1000	0.03	1.02	1.02
1500	0.03	1.02	1.02
2000	0.04	1.03	1.03
2500	0.04	1.03	1.03
3000	0.04	1.03	1.04
4000	0.04	1.03	1.03
5000	0.04	1.02	1.02
6000	0.04	1.02	1.02
9000	0.07	1.09	1.09
10000	0.08	1.11	1.11
12000	0.09	1.10	1.09
13000	0.08	1.09	1.08
14000	0.08	1.04	1.04
15000	0.10	1.03	1.03
17000	0.12	1.09	1.09
18000	0.11	1.12	1.13



NOTES

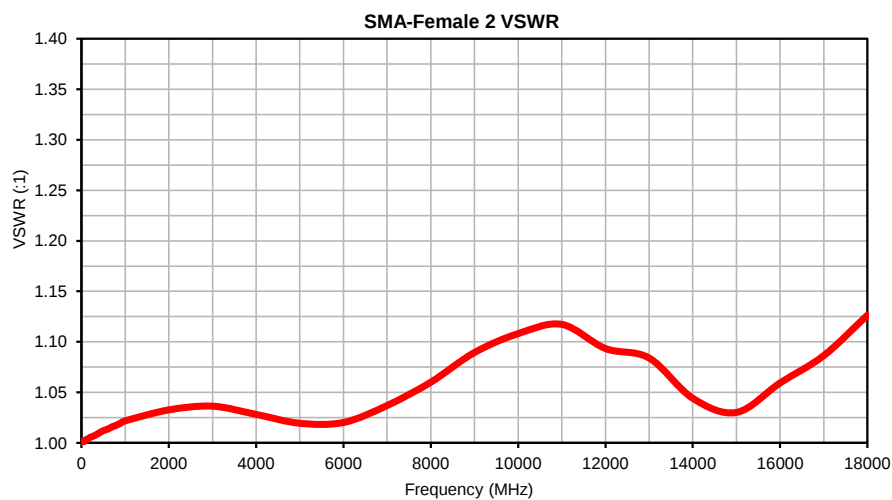
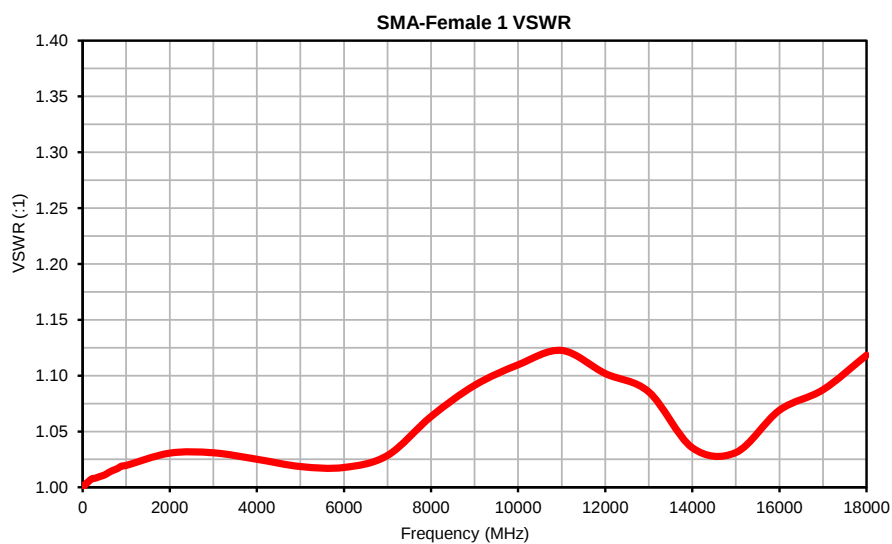
- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html



Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	SMA-FEMALE 1 VSWR (:1)	SMA-FEMALE 2 VSWR (:1)
10	0.01	1.00	1.00
30	0.00	1.00	1.00
50	0.00	1.00	1.00
70	0.00	1.00	1.00
90	0.00	1.00	1.00
100	0.00	1.00	1.00
200	0.00	1.01	1.01
300	0.01	1.01	1.01
400	0.01	1.01	1.01
500	0.01	1.01	1.01
600	0.02	1.01	1.01
700	0.02	1.02	1.02
800	0.02	1.02	1.02
900	0.02	1.02	1.02
1000	0.03	1.02	1.02
2000	0.04	1.03	1.03
3000	0.04	1.03	1.04
4000	0.04	1.03	1.03
5000	0.04	1.02	1.02
6000	0.04	1.02	1.02
7000	0.05	1.03	1.04
8000	0.06	1.06	1.06
9000	0.07	1.09	1.09
10000	0.08	1.11	1.11
11000	0.09	1.12	1.12
12000	0.09	1.10	1.09
13000	0.08	1.09	1.08
14000	0.08	1.04	1.04
15000	0.10	1.03	1.03
16000	0.11	1.07	1.06
17000	0.12	1.09	1.09
18000	0.11	1.12	1.13

Typical Performance Curves





All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-40° to 100° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-40° to 120°C, 10 cycles	MIL-STD-202, Method 107, Condition A, except -40° to +120°C, and 10 cycles