COAXIAL

Adapter, SMA-F to SMA-M

SF-SM50+

50Ω DC to 18 GHz

FEATURES

- Flat response
- Excellent VSWR, 1.05:1 typ. up to 12.4 GHz and 1.15:1 typ. up to 18 GHz
- Low cost adapters, available from stock
- Rugged stainless steel body

Generic photo used for illustration purposes only

Model No.	SF-SM50+
Case Style	DJ836
Connectors	SMA-F to SMA-M

APPLICATIONS

- Connector saver
- Cable extender

+RoHS Compliant

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

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		18	GHz
Insertion Loss	DC - 18	—	0.01	—	dB
VSWR	DC-8	—	—	1.15	:1
	DC-12.4	—	—	1.28	
	DC-18	—	—	1.30	

MAXIMUM RATINGS

Parameter	Ratings
Operating temperature	-55°C to 100°C
Storage temperature	-55°C to 100°C

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

REV. F
ECO-012138
SF-SM50+
MCL NY
220221

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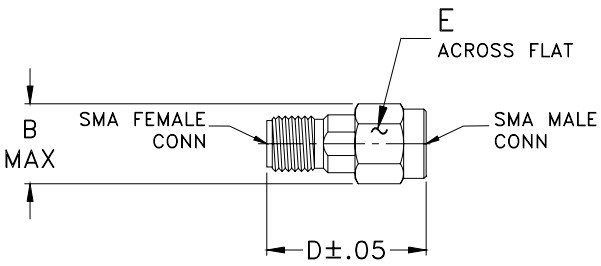
OUTLINE DRAWING

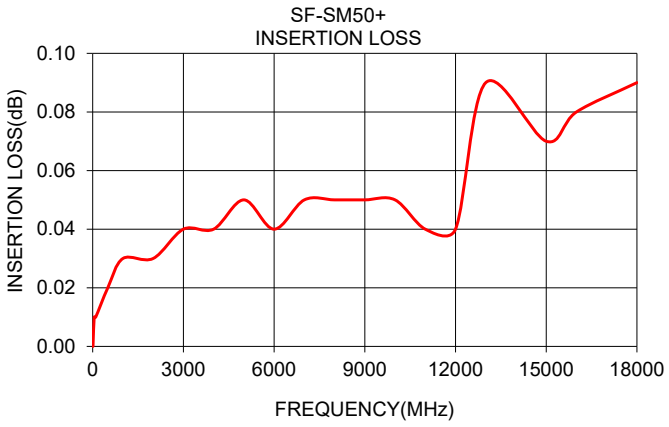


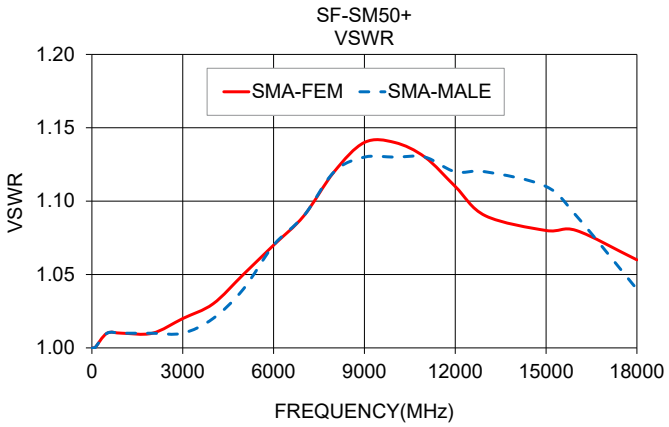
OUTLINE DIMENSIONS (Inch / mm)

A	B	C	D	E	wt
--	.36	--	0.72	.312	grams
--	9.14	--	18.29	7.92	3.2

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		SMA-FEMALE	SMA-MALE
10	0.00	1.00	1.00
50	0.01	1.00	1.00
100	0.01	1.00	1.00
500	0.02	1.01	1.01
1000	0.03	1.01	1.01
2000	0.03	1.01	1.01
3000	0.04	1.02	1.01
4000	0.04	1.03	1.02
5000	0.05	1.05	1.04
6000	0.04	1.07	1.07
7000	0.05	1.09	1.09
8000	0.05	1.12	1.12
9000	0.05	1.14	1.13
10000	0.05	1.14	1.13
11000	0.04	1.13	1.13
12000	0.04	1.11	1.12
13000	0.09	1.09	1.12
15000	0.07	1.08	1.11
16000	0.08	1.08	1.09
18000	0.09	1.06	1.04





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.

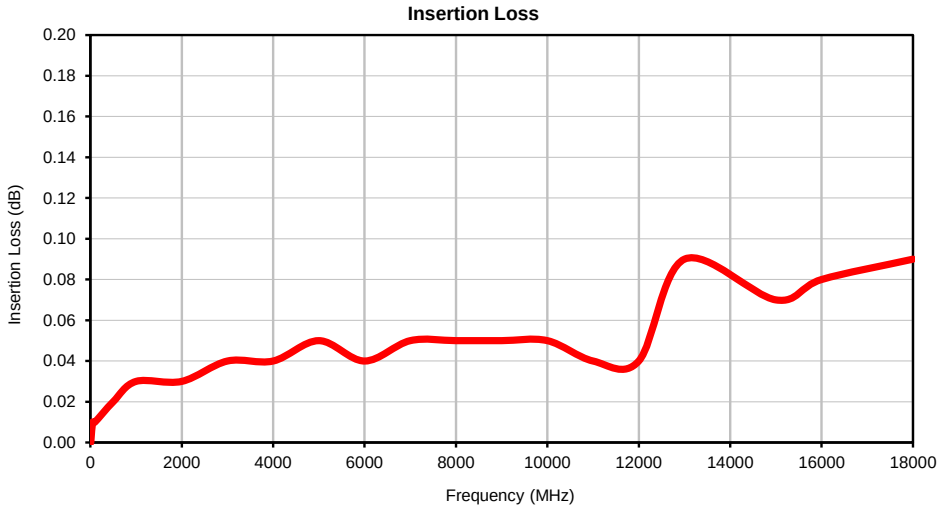
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard. Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

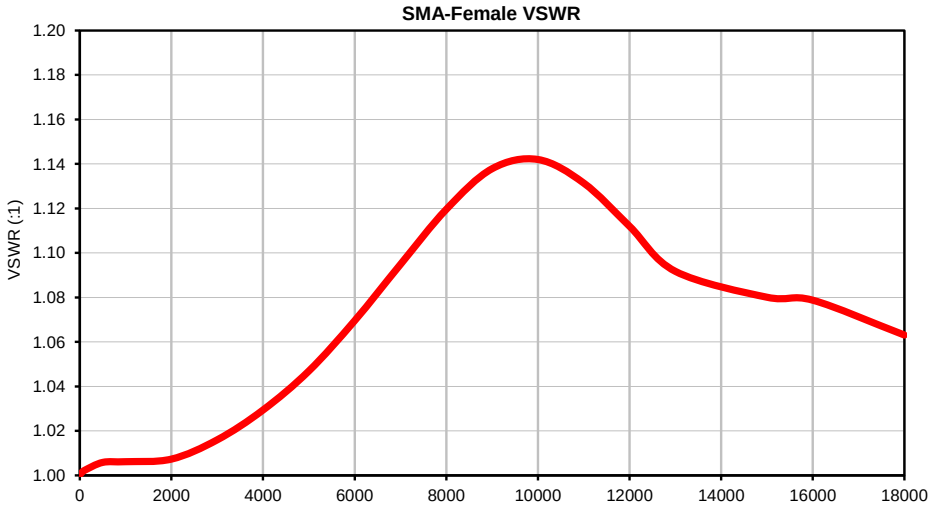
Adapter, SMA-F/SMA-M SF-SM50+

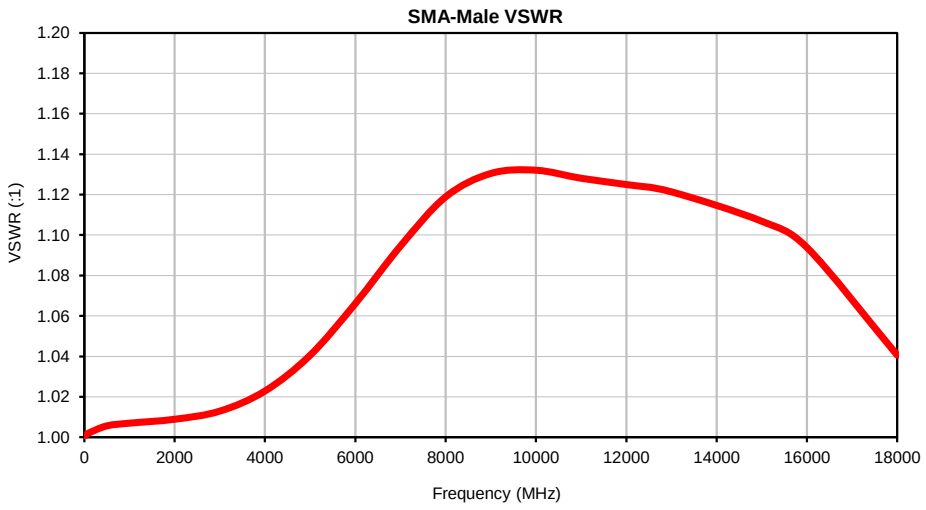
Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	SMA-FEMALE VSWR (:1)	SMA-MALE VSWR (:1)
10	0.00	1.00	1.00
50	0.01	1.00	1.00
100	0.01	1.00	1.00
500	0.02	1.01	1.01
1000	0.03	1.01	1.01
2000	0.03	1.01	1.01
3000	0.04	1.02	1.01
4000	0.04	1.03	1.02
5000	0.05	1.05	1.04
6000	0.04	1.07	1.07
7000	0.05	1.09	1.09
8000	0.05	1.12	1.12
9000	0.05	1.14	1.13
10000	0.05	1.14	1.13
11000	0.04	1.13	1.13
12000	0.04	1.11	1.12
13000	0.09	1.09	1.12
15000	0.07	1.08	1.11
16000	0.08	1.08	1.09
18000	0.09	1.06	1.04

Typical Performance Curves



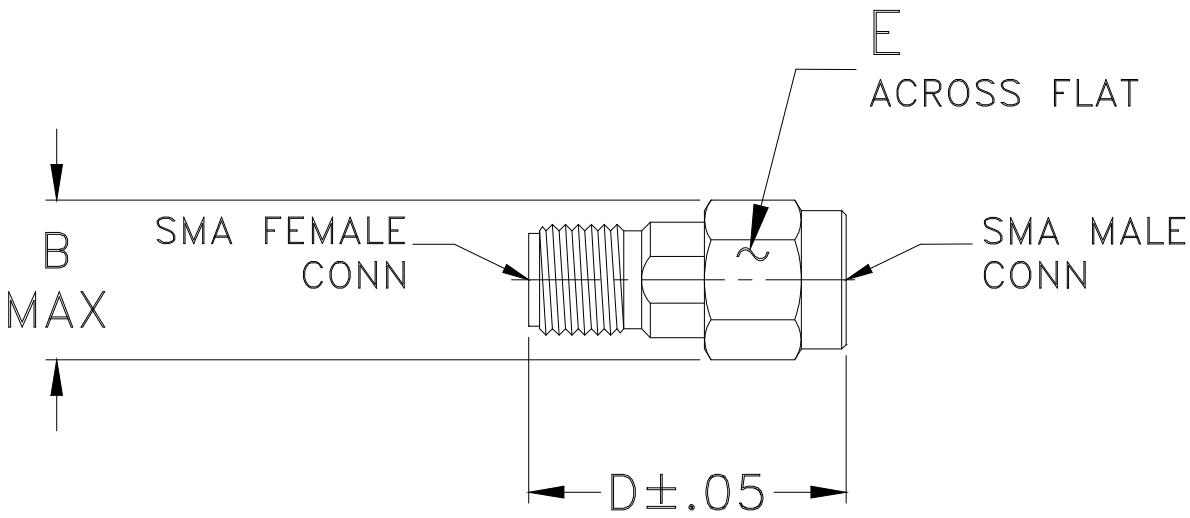




Case Style DJ

DJ836

Outline Dimensions



CASE#	A	B	C	D	E	WT. GRAM
DJ836	-- --	.36 (9.14)	-- --	0.72 (18.29)	.312 (7.92)	3.2

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3 Pl. ± .015

Notes:

1. Case material: Stainless steel.
2. Finish: Passivation.
3. For polarity of connector refer individual model data sheet.

Mini-Circuits

Environmental Specifications ENV28

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	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I