COAXIAL

Adapter

SF-SM50+

50Ω DC to 18 GHz SMA Female to SMA Male

FEATURES

- Flat Response
- Excellent VSWR, 1.05:1 typ. up to 12.4 GHz and 1.1:1 typ. up to 18 GHz
- Low Cost Adapters, Available From Stock
- Rugged Stainless Steel Body



Generic photo used for illustration purposes only

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

APPLICATIONS

- Connector Saver
- Cable Extender

ELECTRICAL SPECIFICATIONS AT +25 °C

Parameter	Frequency (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	—	—	1.28	
	DC–18	—	—	1.30	

–

ABSOLUTE 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
260619

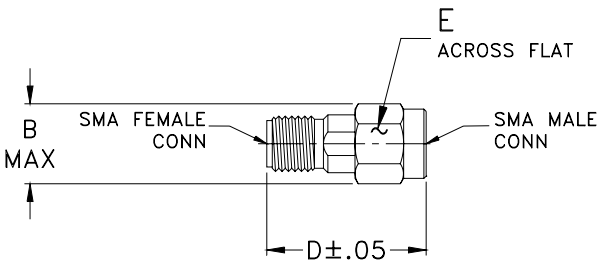
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OUTLINE DRAWING

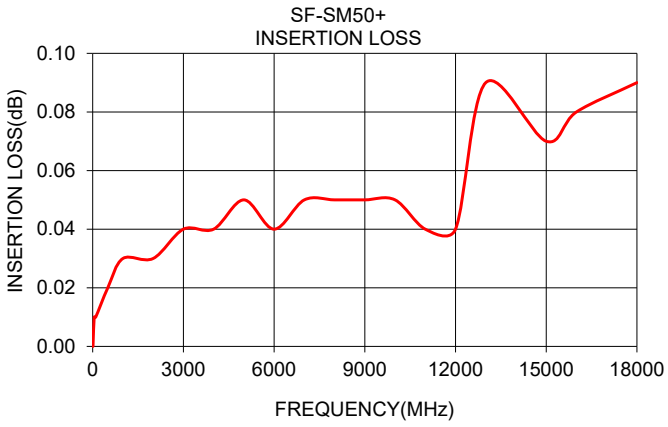


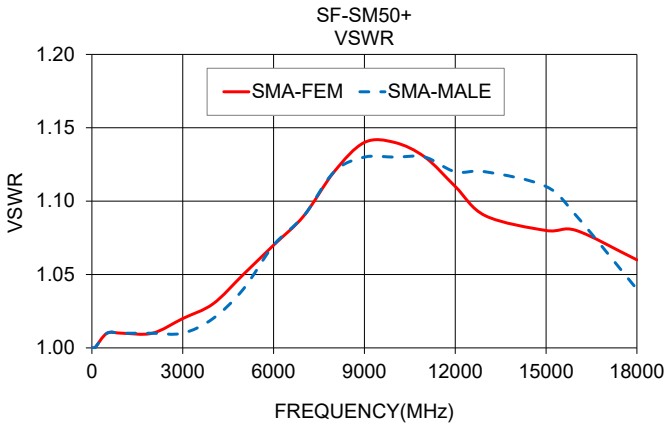
OUTLINE DIMENSIONS (Inch / mm)

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

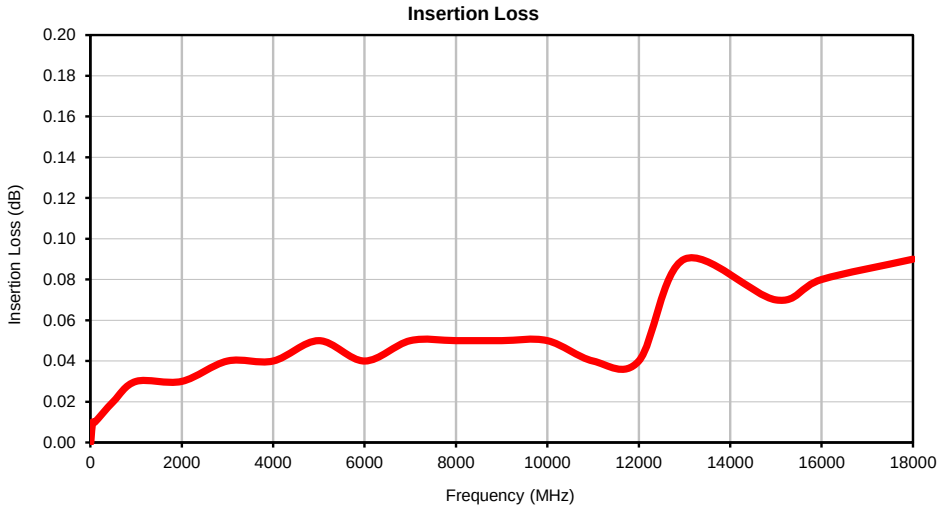
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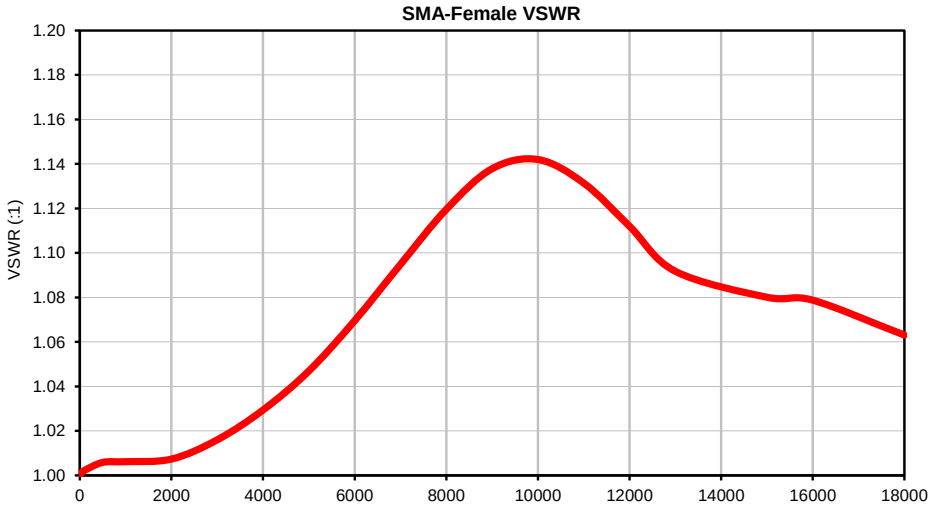
Adapter, SMA-F/SMA-M SF-SM50+

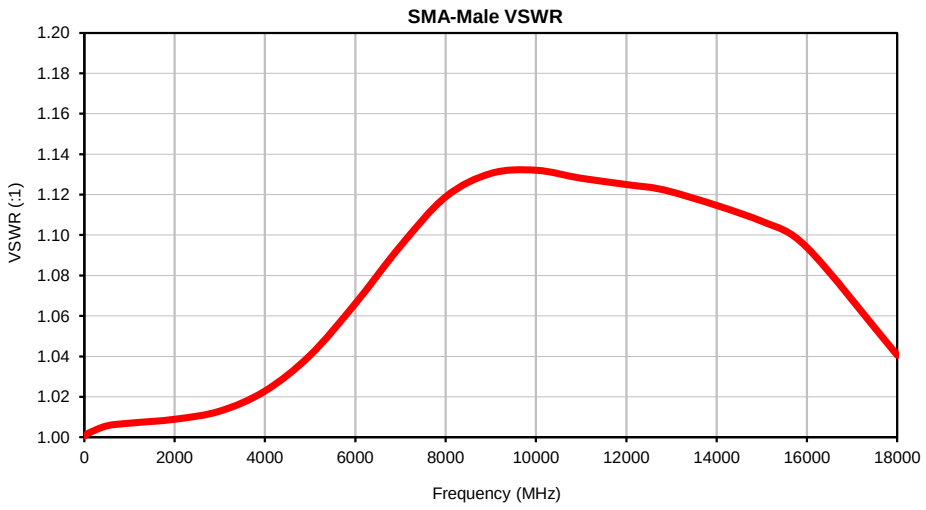
Typical Performance Data

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



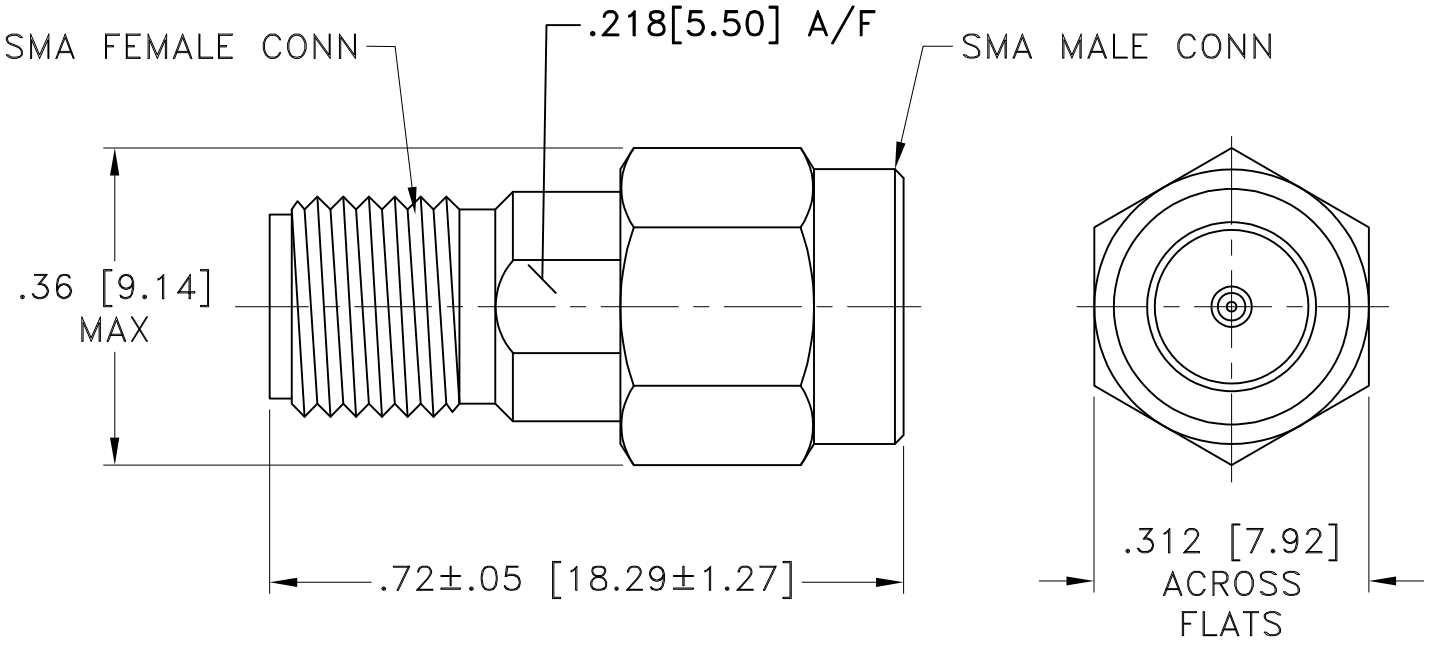




Case Style DJ

Outline Dimensions

DJ836



Weight: 3.2 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03; 3 Pl. ±.015 Inches

Notes:

1. Case material: Stainless steel.
2. Case Finish: Passivation or Gold Plating. (See inidividual model datasheet).
3. For polarity of connector refer individual model data sheet.

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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

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