



FEATURES

- Quick connect/disconnect mating
- 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, gold plated



Generic photo used for illustration purposes only

Model No.	SF-MQK50+
Case Style	DJ836
Connectors	SMA Female to SMA Male

+RoHS Compliant

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

APPLICATIONS

- Connector saver
- Cable extender

ELECTRICAL SPECIFICATIONS $T_{AMB}=25^{\circ}\text{C}$

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	—	—	1.25	
	DC - 18	—	—	1.25	

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.



Mini-Circuits

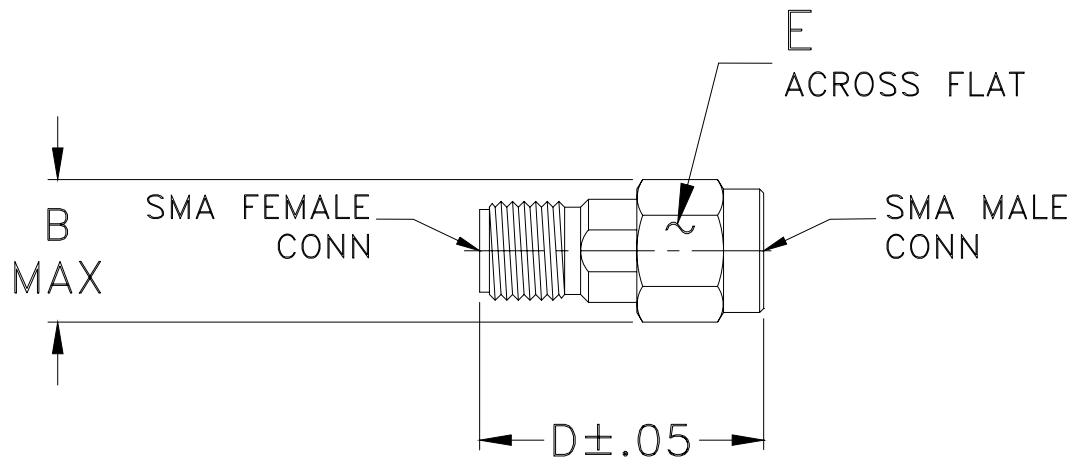
COAXIAL

Adapter

SF-MQK50+

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

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



COAXIAL

Adapter

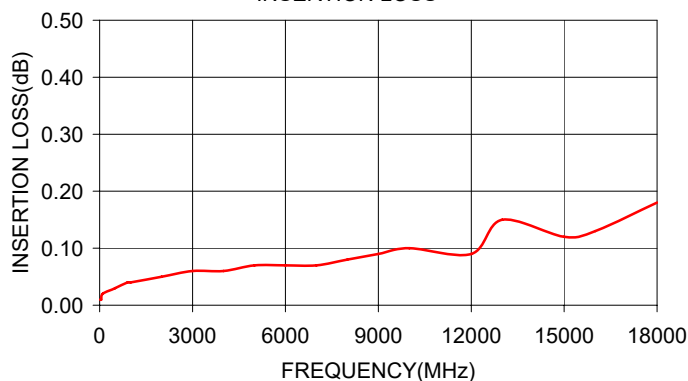
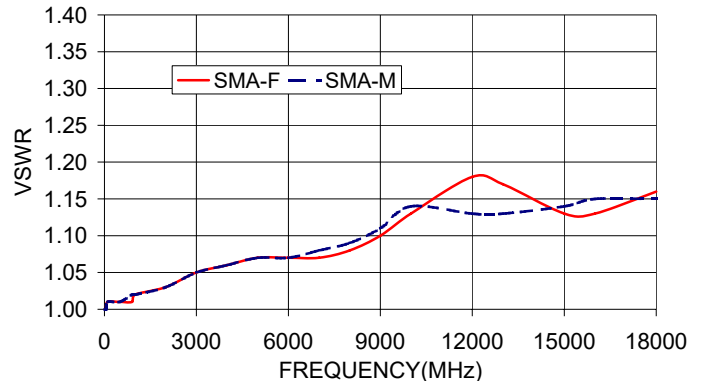
SF-MQK50+

Mini-Circuits

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

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		SMA-F	SMA-M
10.00	0.01	1.00	1.00
50.00	0.01	1.00	1.00
100.00	0.02	1.01	1.01
500.00	0.03	1.01	1.01
900.00	0.04	1.01	1.02
1000.00	0.04	1.02	1.02
2000.00	0.05	1.03	1.03
3000.00	0.06	1.05	1.05
4000.00	0.06	1.06	1.06
5000.00	0.07	1.07	1.07
6000.00	0.07	1.07	1.07
7000.00	0.07	1.07	1.08
8000.00	0.08	1.08	1.09
9000.00	0.09	1.10	1.11
10000.00	0.10	1.13	1.14
12000.00	0.09	1.18	1.13
13000.00	0.15	1.17	1.13
15000.00	0.12	1.13	1.14
16000.00	0.13	1.13	1.15
18000.00	0.18	1.16	1.15

SF-MQK50
INSERTION LOSSSF-MQK50
VSWR

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



Adapter, SMA-Female to SMA-Male

SF-MQK50+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	SMA-FEMALE RETURN LOSS (dB)	SMA-MALE RETURN LOSS (dB)
10	0.01	46.06	46.06
50	0.01	46.06	46.06
100	0.02	46.06	46.06
500	0.03	46.06	46.06
900	0.04	46.06	40.09
1000	0.04	40.09	40.09
2000	0.05	36.61	36.61
3000	0.06	32.26	32.26
4000	0.06	30.71	30.71
5000	0.07	29.42	29.42
6000	0.07	29.42	29.42
7000	0.07	29.42	28.30
8000	0.08	28.30	27.32
9000	0.09	26.44	25.66
10000	0.10	24.29	23.69
12000	0.09	24.29	23.69
13000	0.15	24.29	23.69
15000	0.12	24.29	23.69
16000	0.13	24.29	23.69
18000	0.18	24.29	23.69

REV. X1
SF-MQK50+
061114
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IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED RoHS compliant

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

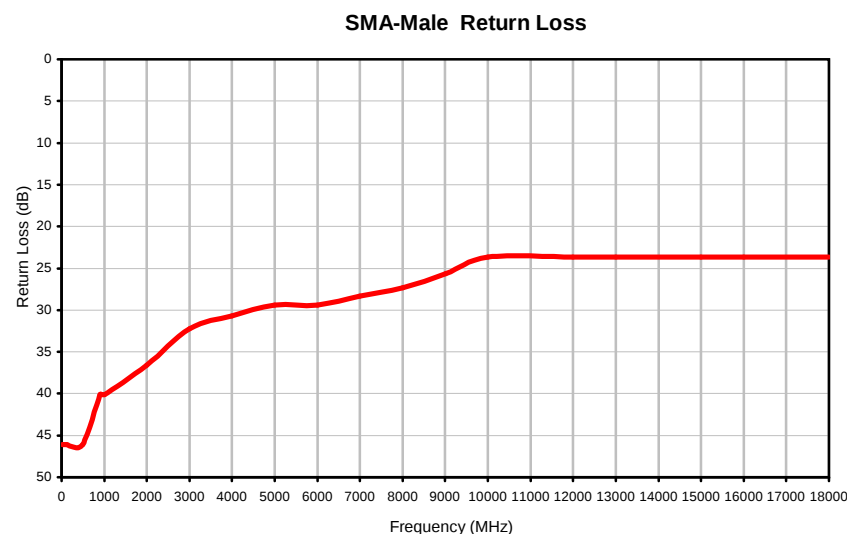
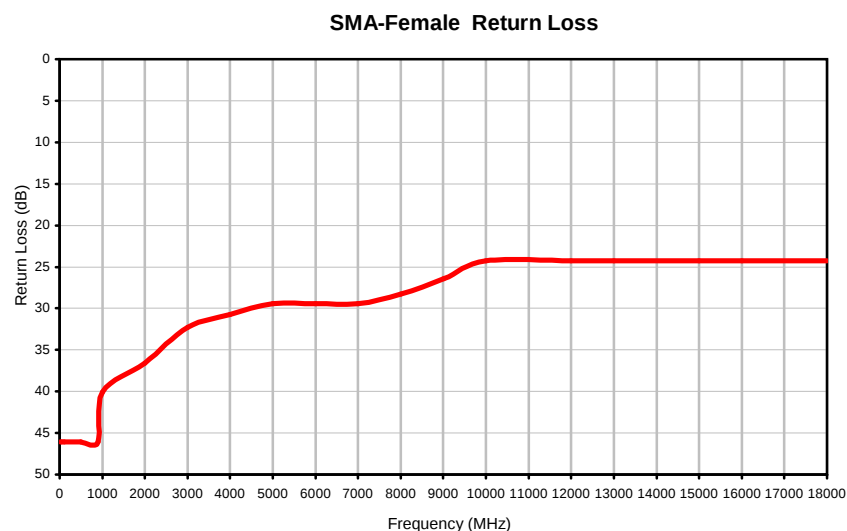
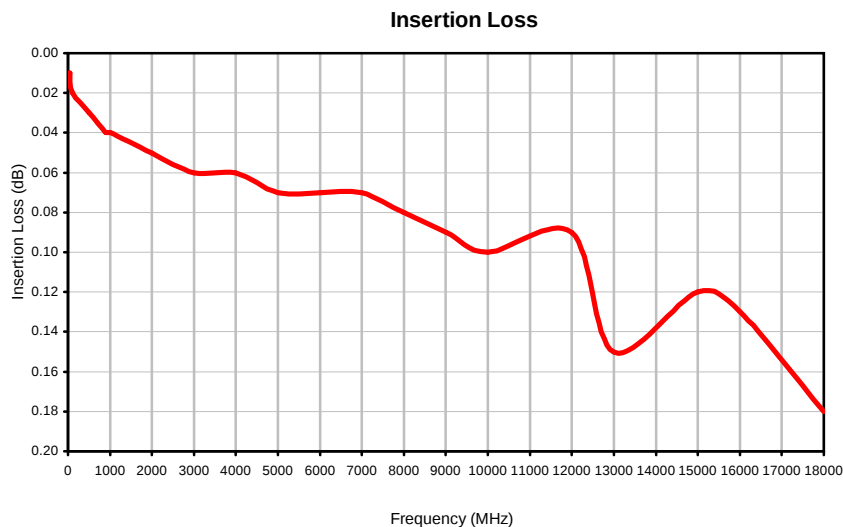


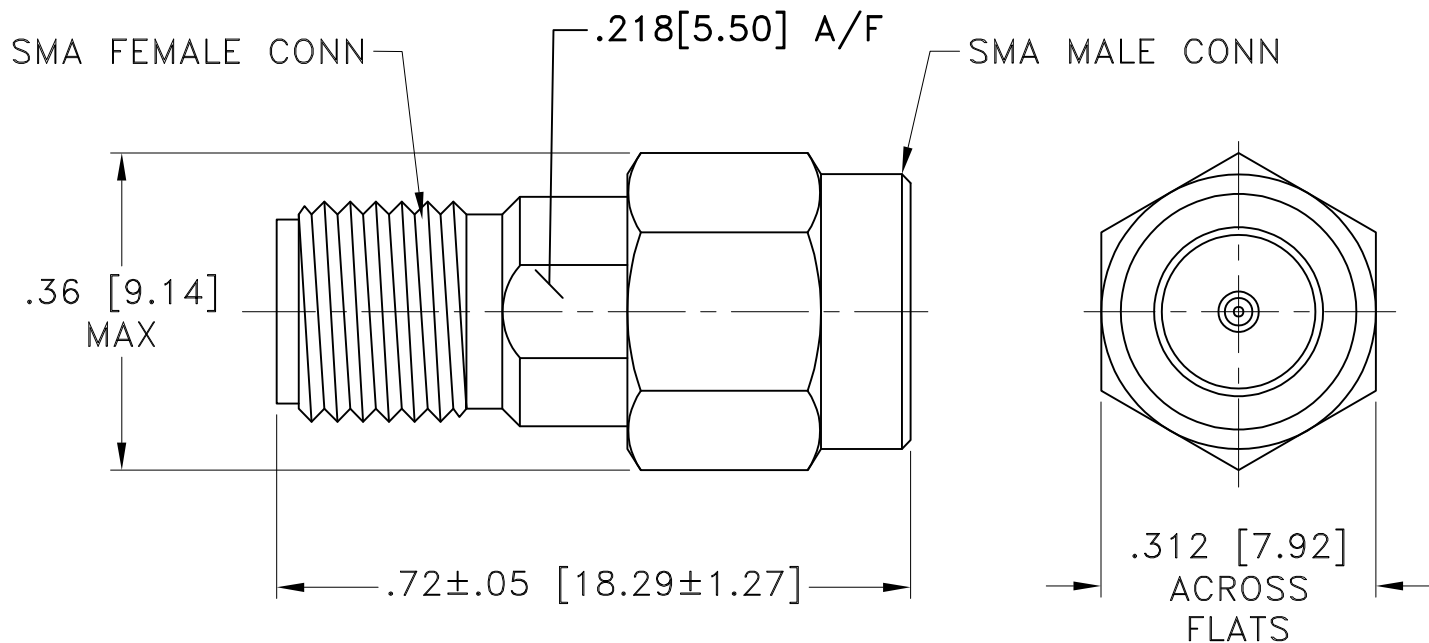
Patent Pending

The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



Typical Performance Curves





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 individual model datasheet).
3. For polarity of connector refer individual model data sheet.



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Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS



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