COAXIAL

Adapter

SF-MQK50+

50Ω DC to 18 GHz SMA Female to Quick Connect SMA Male

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 Quick Connect 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 °C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		18	GHz
Insertion Loss	DC–18	—	0.18	—	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.

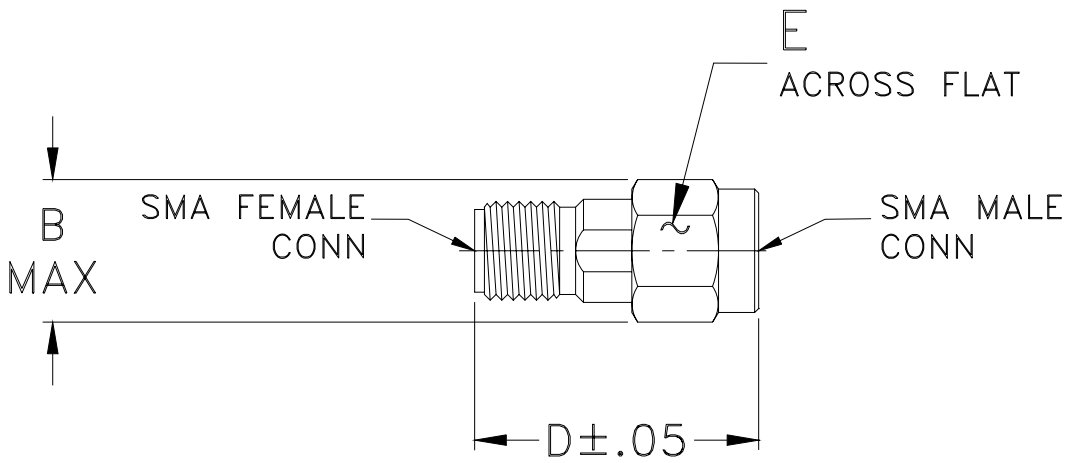
REV. B
ECO-016626
SF-MQK50+
MCL NY
260413

Adapter

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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

COAXIAL

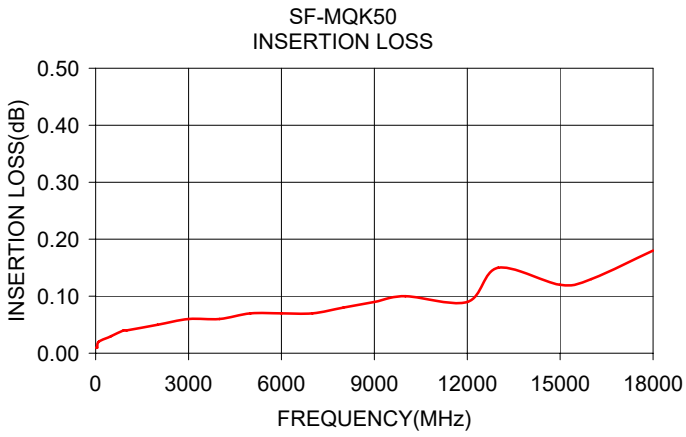
Adapter

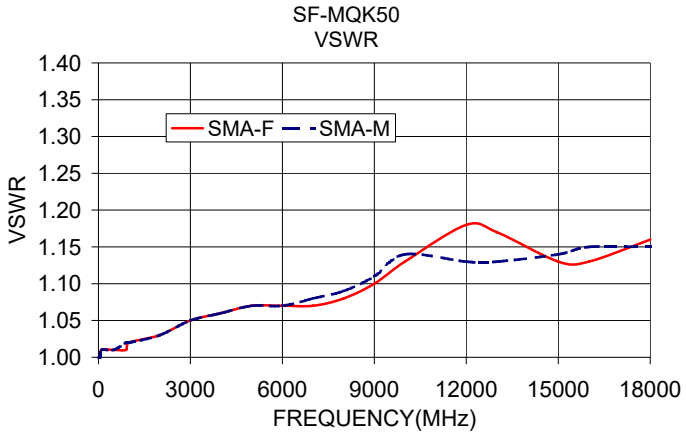
SF-MQK50+

50Ω DC to 18 GHz SMA Female to Quick Connect SMA Male

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		SMA Female	Quick Connect SMA Male
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





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

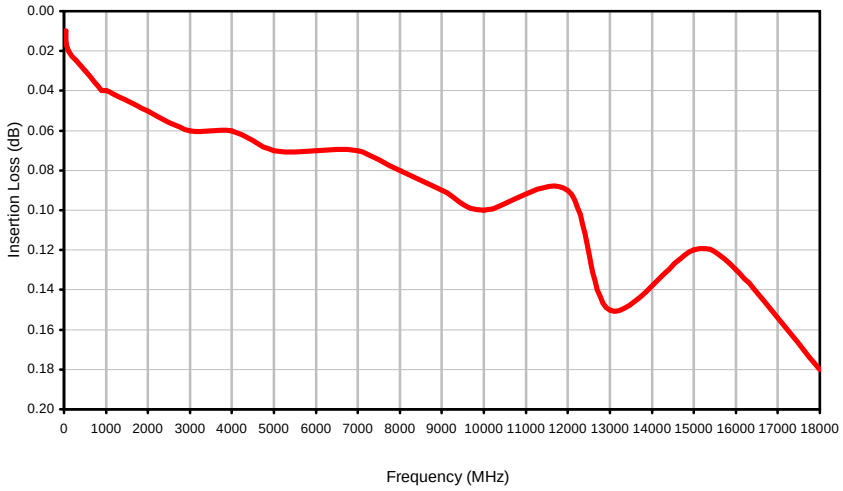
FREQUENCY (MHz)	INSERTION LOSS (dB)	SMA-FEMALE RETURN LOSS (dB)	SMA-MALE RETURN LOSS (dB)
10	0.01	46.06	46.06
50	0.01	46.06	46.06
100	0.02	46.06	46.06
500	0.03	46.06	46.06
900	0.04	46.06	40.09
1000	0.04	40.09	40.09
2000	0.05	36.61	36.61
3000	0.06	32.26	32.26
4000	0.06	30.71	30.71
5000	0.07	29.42	29.42
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

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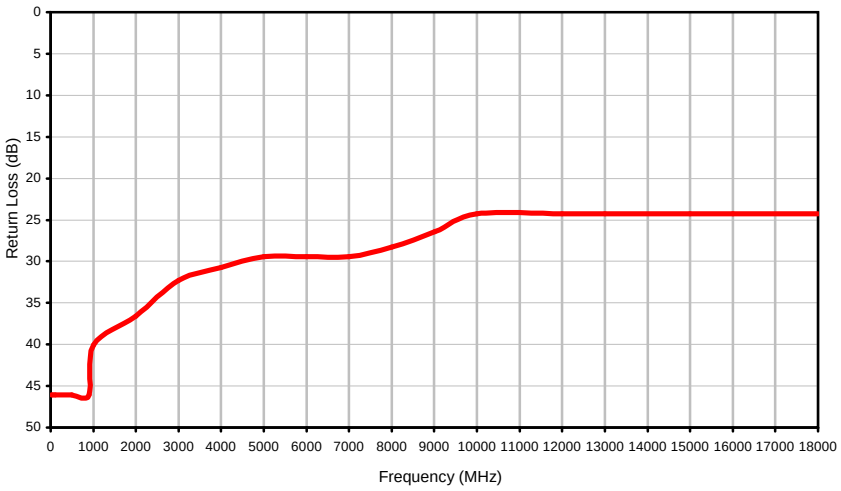
Adapter, SMA-Female to SMA-Male SF-MQK50+

Typical Performance Curves

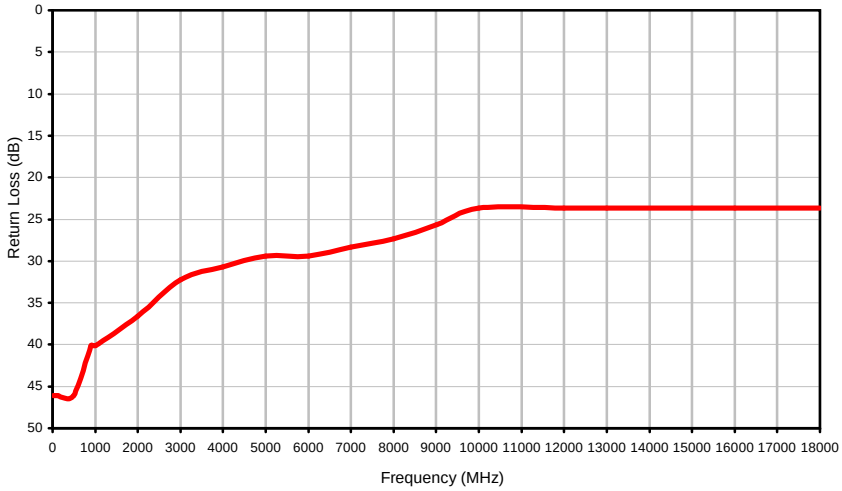
Insertion Loss



SMA-Female Return Loss



SMA-Male Return Loss

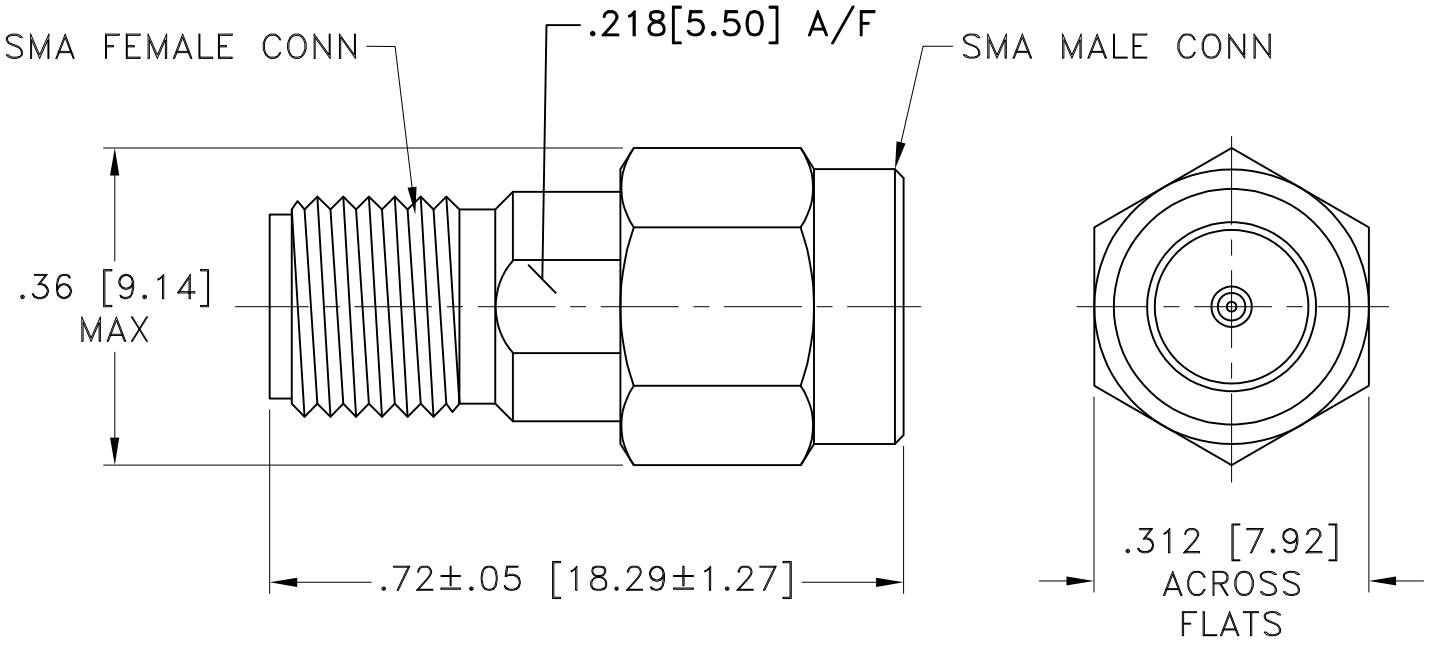


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Case Style DJ

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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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

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