COAXIAL

Adapter

SMPM-24M+

50Ω DC to 40 GHz SMP-Male to 2.4 mm Male

THE BIG DEAL

- Ultra-Wideband, DC to 40 GHz
- Flat Response
- Low Insertion Loss, 0.27 dB typ.
- Excellent VSWR, 1.1:1 typ.
- SMP-Male with full detent

Generic photo used for illustration purposes only

Model No.	SMPM-24M+
Case Style	DJ2382-2
Connectors	SMP-Male to 2.4mm-Male

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

APPLICATIONS

- 5G
- KA/KU band
- Satellite Communications

PRODUCT OVERVIEW

Mini-Circuits' SMPF-SM50+ is a coaxial SMP-F to SMA-M adapter supporting a wide range of applications from DC to 18 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The SMPM-24M+ features passivated stainless steel (SMA side) and Gold-plated beryllium copper construction (SMP side) and measures only 0.28" (l) x 0.70" (dia.)

KEY FEATURES

Feature	Advantages
Wide band, DC to 40 GHz	Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Excellent VSWR, 1.1:1 typ.	Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range.
Low Insertion Loss, 0.27 dB typ.	Provides excellent signal power transmission from input to output.
Full Detent: Force needed to mate, 9 lbs, Force needed to de-mate, 7 lbs	Prevents the connector from detaching accidently
Rugged, passivated stainless steel construction	Stands up to wear and tear in demanding environments and provides excellent reliability.
Very wide operating temperature range, -55 to +100˚C	Withstands extreme operating conditions and is suitable for use near high power componentry where heat rise is common.

REV. B
ECO-016727
SMPM-24M+
MCL NY
230220

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		40	GHz
Insertion Loss	DC - 40	—	0.27	0.8	dB
VSWR	DC - 40	—	1.10	1.35	:1

ABSOLUTE MAXIMUM RATINGS

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

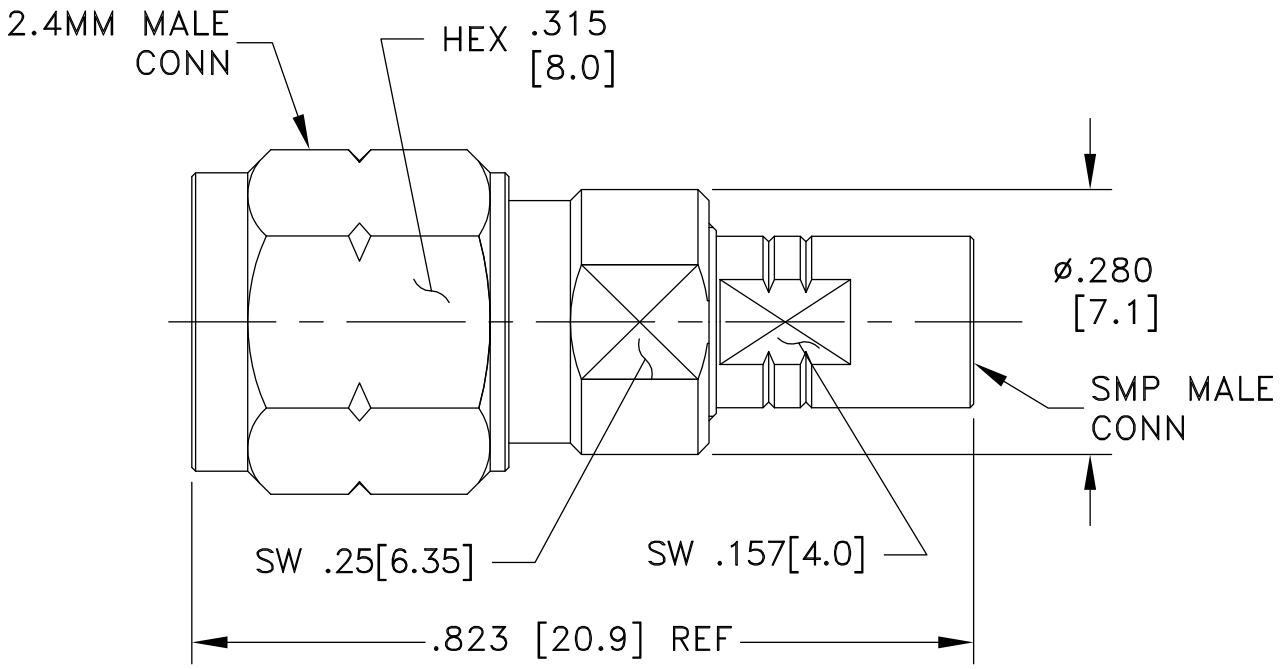
Permanent damage may occur if any of these limits are exceeded.

Adapter

SMPM-24M+

50Ω DC to 40 GHz SMP-Male to 2.4 mm Male

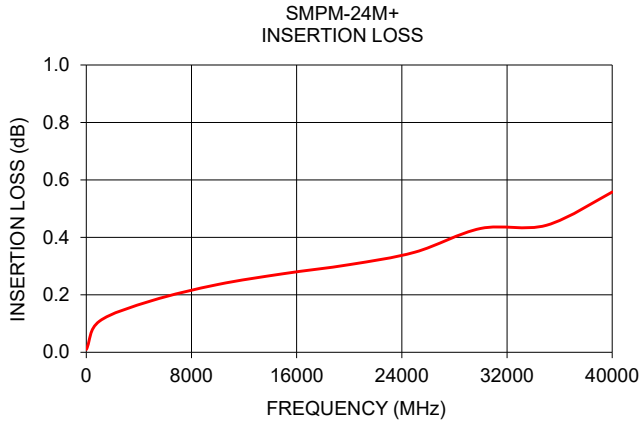
OUTLINE DRAWING

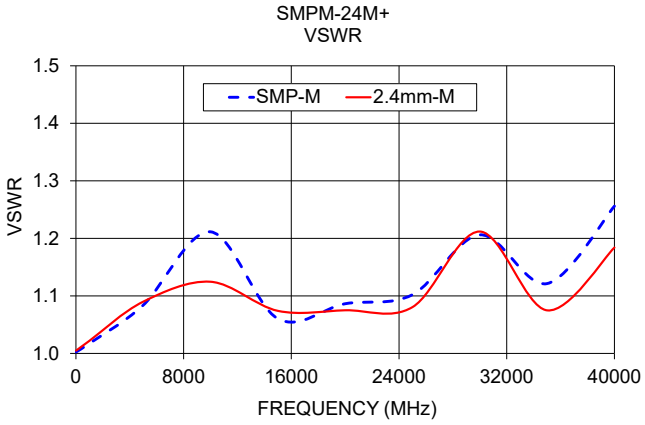


Weight: 4.66 grams
Dimensions are in inches [mm].

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		SMP-Male	2.4mm-Male
10	0.01	1.00	1.00
1000	0.11	1.02	1.02
5000	0.18	1.08	1.09
10000	0.24	1.21	1.12
15000	0.27	1.06	1.07
20000	0.31	1.09	1.08
25000	0.35	1.10	1.08
30000	0.43	1.21	1.21
35000	0.44	1.12	1.07
40000	0.56	1.26	1.18





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

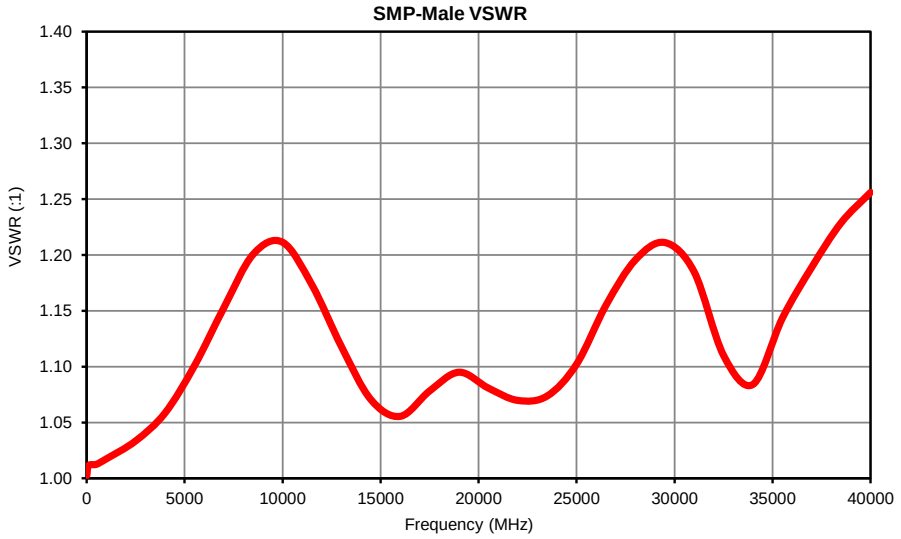
Adapter, SMP Male to 2.4mm Male SMPM-24M+

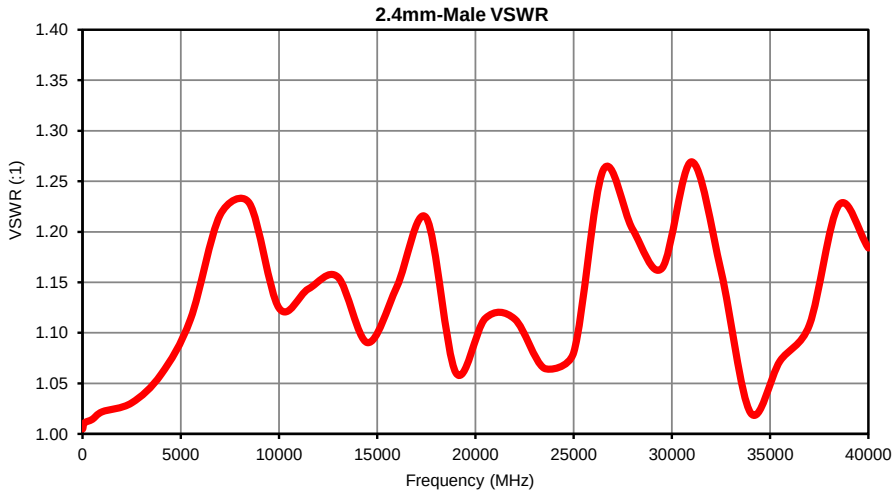
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	SMP-MALE VSWR (:1)	2.4mm-MALE VSWR (:1)
10	0.01	1.00	1.00
100	0.04	1.01	1.01
500	0.09	1.01	1.01
1000	0.11	1.02	1.02
2500	0.13	1.03	1.03
4000	0.16	1.06	1.06
5500	0.19	1.10	1.11
7000	0.23	1.15	1.22
8500	0.25	1.20	1.23
10000	0.24	1.21	1.12
11500	0.27	1.17	1.14
13000	0.28	1.12	1.16
14500	0.28	1.07	1.09
16000	0.29	1.06	1.15
17500	0.31	1.08	1.21
19000	0.29	1.09	1.06
20500	0.32	1.08	1.11
22000	0.33	1.07	1.11
23500	0.33	1.07	1.06
25000	0.35	1.10	1.08
26500	0.40	1.15	1.26
28000	0.38	1.20	1.20
29500	0.41	1.21	1.16
31000	0.45	1.18	1.27
32500	0.42	1.11	1.16
34000	0.44	1.08	1.02
35500	0.43	1.14	1.07
37000	0.46	1.19	1.11
38500	0.53	1.23	1.23
40000	0.56	1.26	1.18

Adapter, SMP Male to 2.4mm Male SMPM-24M+

Typical Performance Curves

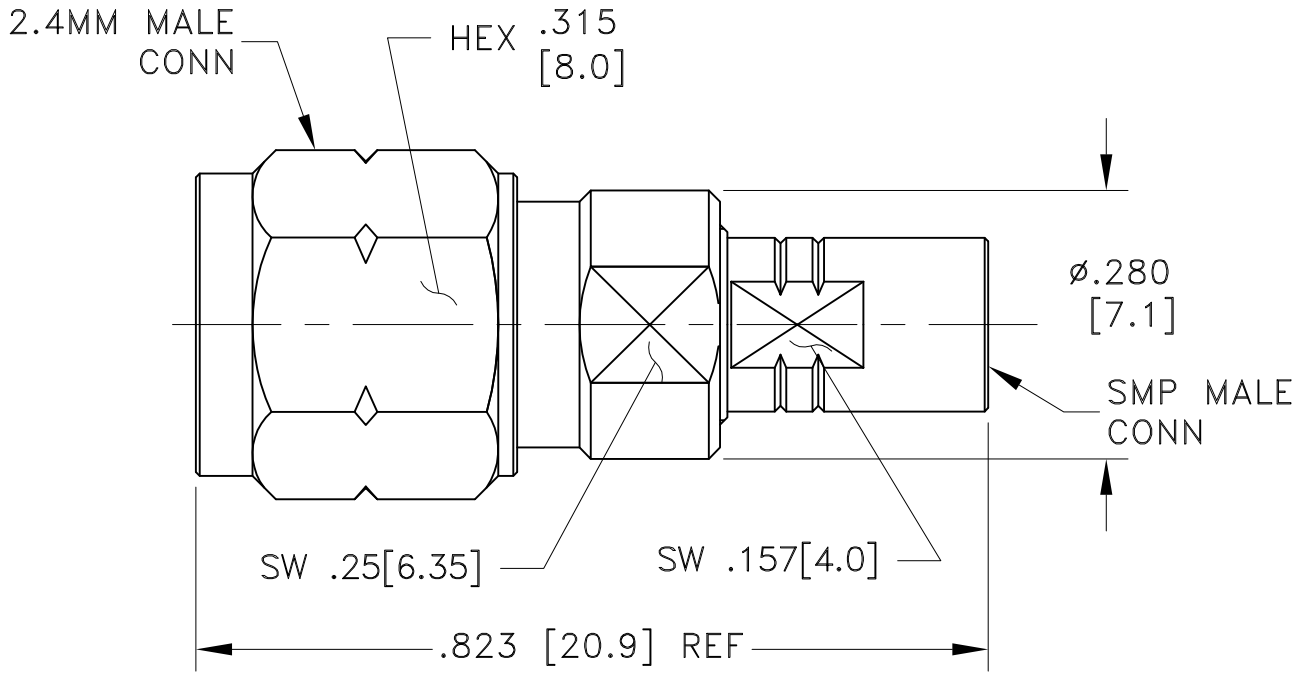




Case Style DJ

Outline Dimensions

DJ2382-2



Weight: 4.66 grams

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

Notes:

1. Case material: Stainless steel.
2. Finish: Passivation.

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Environmental Specifications **ENV52**

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 105° C or -55° to 85° C (see datasheet) Ambient Environment	Individual Model Data sheet
Storage Temperature	-55° to 105° C or -55° to 85° C (see data sheet) Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 100°C, 100 Cycles	MIL-STD-202F; Method 107G
Multiple Bend Radius	40 mm, 5 times for 141 series cables 30 mm, 5 times for 086 series cables	
Single Bend Radius	8 mm for 141 series cables 6 mm for 086 series cables	

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