

Coaxial

# Adapter *2.4 mm-F to 2.4 mm-M*

**24F-24M+**

50Ω DC to 50 GHz

## The Big Deal

- Ultra-wideband, DC-50 GHz
- Flat response
- Low insertion loss, 0.12 dB
- Excellent VSWR, 1.06:1



CASE STYLE: DJ2478

## Product Overview

Mini-Circuits' 24F-24M+ is a coaxial 2.4 mm-F to 2.4 mm-M adapter supporting a wide range of applications from DC to 50 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The 24F-24M+ features passivated stainless steel construction and measures only 0.72" (l) x 0.36" (dia.).

## Key Features

Feature	Advantages
Wideband, DC to 50 GHz	Wide frequency range provides application flexibility and makes this model ideal for broad-band and multi-band use.
Excellent VSWR, 1.06:1	Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range.
Low insertion loss, 0.12 dB	Provides excellent signal power transmission from input to output.
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 components where heat rise is common.

### 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.  
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# Coaxial Adapter

## 2.4 mm-F to 2.4 mm-M

50Ω DC to 50 GHz

### Maximum 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.	

### Features

- flat response
- excellent VSWR, 1.06 typ. up to 50 GHz
- low cost adapters, available from stock
- stainless steel body, passivated

### Applications

- interconnection of RF cable and equipment

## 24F-24M+



Generic photo used for illustration purposes only

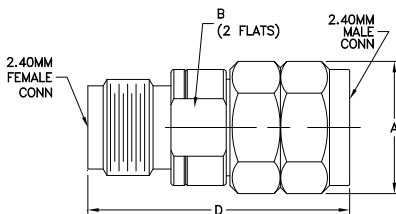
CASE STYLE: DJ2478

Connectors	Model
2.4 mm-F to 2.4 mm-M	24F-24M+

### +RoHS Compliant

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

### Outline Drawing



### Outline Dimensions (inch/mm)

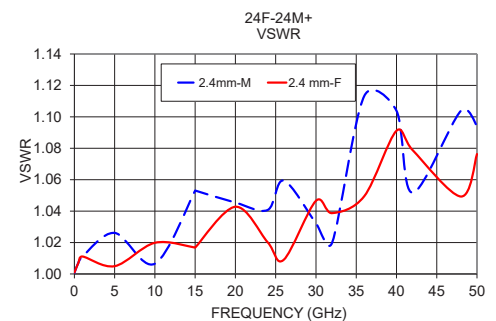
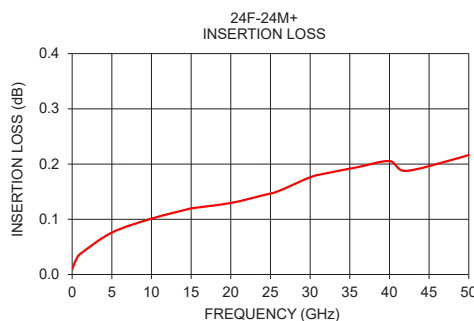
A	B	C	D	E	wt
0.362	0.276	--	0.720	--	grams
9.20	7.00	--	18.30	--	5.0

### Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		40	GHz
Insertion Loss	DC - 5	—	0.05	0.4	dB
	5 - 10	—	0.09	0.4	
	10 - 20	—	0.12	0.4	
	20 - 40	—	0.16	0.4	
VSWR	40 - 50	—	0.20	0.4	:1
	DC - 5	—	1.01	1.15	
	5 - 10	—	1.01	1.15	
	10 - 20	—	1.03	1.15	
	20 - 40	—	1.05	1.15	
	40 - 50	—	1.06	1.15	

### Typical Performance Data

Frequency (GHz)	Insertion Loss (dB)	VSWR (:1)	
		2.4 mm-M	2.4 mm-F
0.01	0.010	1.00	1.00
0.5	0.027	1.01	1.01
1.0	0.037	1.01	1.01
5.0	0.076	1.03	1.00
10.0	0.101	1.01	1.02
15.0	0.120	1.05	1.02
15.0	0.120	1.05	1.02
20.0	0.130	1.05	1.04
24.0	0.143	1.04	1.02
26.0	0.151	1.06	1.01
30.0	0.176	1.03	1.05
32.0	0.183	1.02	1.04
36.0	0.194	1.11	1.05
40.0	0.205	1.10	1.09
42.0	0.188	1.05	1.08
48.0	0.208	1.10	1.05
50.0	0.217	1.09	1.08



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