Coaxial

Adapter 2.4 mm-F to 2.4 mm-F

24F-24F+

DC to 50 GHz 50Ω

The Big Deal

- Ultra-wideband, DC-50 GHz
- Flat response
- Low insertion loss, 0.14 dB
- Excellent VSWR, 1.03:1



Product Overview

Mini-Circuits' 24F-24F+ is a coaxial 2.4 mm-F to 2.4 mm-F 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-24F+ features passivated stainless steel construction and measures only 0.77" (I) x 0.31" (dia.).

Kev 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, 1.03:1	Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range.		
Low insertion loss, 0.14 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 componentry where heat rise is common.		

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.ninicircuits.com/MCLStore/terms.jsp

Adapter 2.4 mm-F to 2.4 mm-F

24F-24F+

DC to 50 GHz 50Ω

Maximum Ratings

2X 2.40MM FEMALE CONN

0.307

7.80

0.276

7.00

Operating Temperature -55°C to 100°C -55°C to 100°C Storage Temperature Permanent damage may occur if any of these limits are exceeded.

Outline Drawing

Outline Dimensions (inch mm)

D

0.768

19.50

grams

4.0

Features · flat response

• stainless steel body, passivated

• excellent VSWR, 1.03 typ. up to 50 GHz • low cost adapters, available from stock

Applications

• interconnection of RF cable and equipment

CASE STYLE: DJ2477

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

+RoHS Compliant

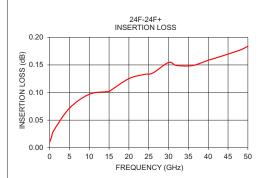
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

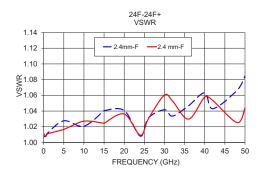
Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Тур.	Max.	Units		
Frequency Range		DC		40	GHz		
	DC - 5	_	0.04	0.4			
	5 - 10	_	0.08	0.4			
Insertion Loss	10 - 20	_	0.11	0.4	dB		
	20 - 40	_	0.14	0.4			
	40 - 50	_	0.18	0.4			
	DC - 5	_	1.01	1.15			
	5 - 10	_	1.02	1.15			
VSWR	10 - 20	_	1.02	1.15	:1		
	20 - 40	_	1.02	1.15			
	40 - 50	_	1.03	1.15			

Typical Performance Data

Frequency (GHz)	Insertion Loss (dB)	VSWR (:1)		
		2.4 mm-F	2.4 mm-F	
0.01	0.010	1.01	1.01	
0.5	0.020	1.01	1.01	
1.0	0.030	1.01	1.01	
5.0	0.071	1.03	1.02	
10.0	0.097	1.02	1.03	
15.0	0.102	1.04	1.02	
15.0	0.102	1.04	1.02	
20.0	0.125	1.04	1.04	
24.0	0.133	1.01	1.01	
26.0	0.135	1.03	1.03	
30.0	0.154	1.04	1.06	
32.0	0.149	1.03	1.05	
36.0	0.149	1.05	1.03	
40.0	0.158	1.06	1.06	
42.0	0.163	1.04	1.05	
48.0	0.177	1.07	1.03	
50.0	0.184	1.08	1.04	





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