



COAXIAL

# Adapter

## 24MR-24M-T+

50Ω DC to 50 GHz Right-Angle 2.4 mm-Male to 2.4 mm-Male

### KEY FEATURES

- Wideband, DC to 50 GHz
- Low Insertion Loss, 0.2 dB typ.
- Excellent VSWR, 1.1:1 typ.
- Right-Angle Adapter
- Adapter provides flat surface for torquing



Generic photo used for illustration purposes only

### PRODUCT OVERVIEW

Mini-Circuits' 24MR-24M-T+ is a coaxial 2.4 mm male to 2.4 mm male right-angle adapter supporting a wide range of applications from DC to 50 GHz. This model provides excellent VSWR and low insertion loss versus frequency. The 24MR-24M-T+ features passivated stainless-steel construction as well as a flat surface in the body for torquing, and measures only 0.67" in length.

### ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		50	GHz
Insertion Loss	DC-10	-	0.1	0.5	dB
	10-20	-	0.1	0.5	
	20-30	-	0.2	0.5	
	30-40	-	0.3	0.5	
	40-50	-	0.3	0.5	
VSWR	DC-10	-	1.1	1.4	:1
	10-20	-	1.1	1.4	
	20-30	-	1.1	1.4	
	30-40	-	1.2	1.4	
	40-50	-	1.1	1.4	

### ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Operating Case Temperature	-45° C to +125° C
Storage Temperature	-45° C to +125° C

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



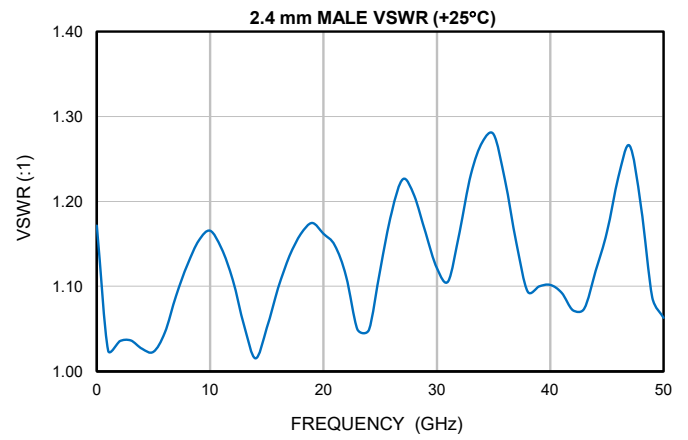
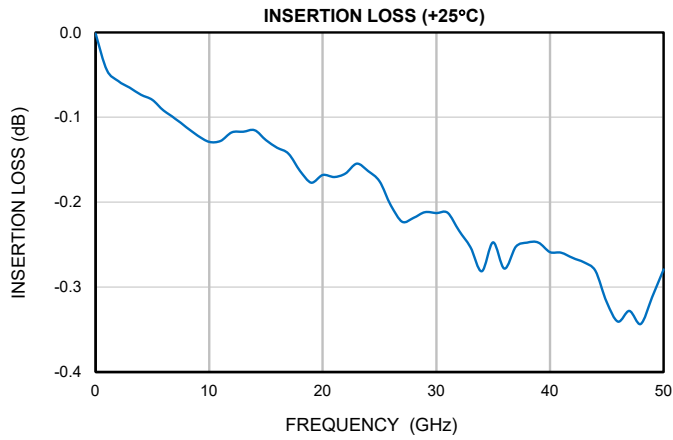
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### TYPICAL PERFORMANCE GRAPHS





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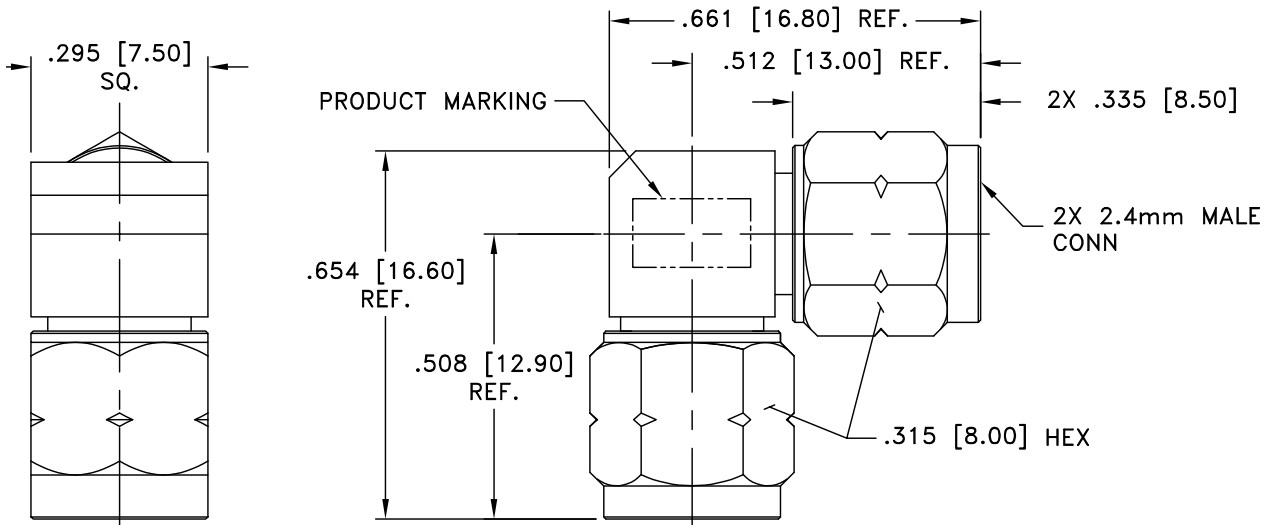
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### CONNECTOR SPECIFICATIONS

Description	Connector 1	Connector 2
Connector Type	2.4 mm Male	2.4 mm Male
Orientation	Right-Angle	Straight

### CASE STYLE DRAWING



Weight: 18.5 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl.  $\pm .030$ ; 3 Pl.  $\pm .015$  Inch

### PRODUCT MARKING\*: 24MR-24M-T+

\*Marking may contain other features or characters for internal lot control.



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Mini-Circuits

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

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Performance Data & Graphs	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	DJ2442-11
RoHS Status	Compliant
Environmental Ratings	ENV147

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-Circuits' 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 <https://www.minicircuits.com/terms/viewterm.html>



# Right Angle Torquing Adapter 2.4 mm Male to 2.4 mm Male

# 24MR-24M-T+

## Typical Performance Data

FREQ.	INSERTION LOSS	2.4 mm MALE VSWR	2.4 mm MALE VSWR
(GHz)	(dB)	(:1)	(:1)
0	0.00	1.17	1.17
1	-0.04	1.02	1.02
2	-0.06	1.04	1.03
3	-0.06	1.04	1.04
4	-0.07	1.03	1.02
5	-0.08	1.02	1.01
6	-0.09	1.05	1.05
7	-0.10	1.09	1.09
8	-0.11	1.13	1.13
9	-0.12	1.15	1.16
10	-0.13	1.17	1.17
11	-0.13	1.14	1.15
12	-0.12	1.11	1.11
13	-0.12	1.05	1.05
14	-0.12	1.02	1.01
15	-0.13	1.05	1.05
16	-0.14	1.10	1.10
17	-0.14	1.14	1.15
18	-0.16	1.16	1.19
19	-0.18	1.17	1.19
20	-0.17	1.16	1.18
21	-0.17	1.15	1.13
22	-0.17	1.11	1.09
23	-0.15	1.05	1.03
24	-0.16	1.05	1.06
25	-0.18	1.12	1.11
26	-0.20	1.19	1.18
27	-0.22	1.23	1.21
28	-0.22	1.21	1.21
29	-0.21	1.16	1.17
30	-0.21	1.12	1.12
31	-0.21	1.11	1.12
32	-0.23	1.16	1.17
33	-0.25	1.23	1.23
34	-0.28	1.27	1.27
35	-0.25	1.28	1.28
36	-0.28	1.23	1.23
37	-0.25	1.15	1.16
38	-0.25	1.09	1.10
39	-0.25	1.10	1.07
40	-0.26	1.10	1.07
41	-0.26	1.09	1.08
42	-0.27	1.07	1.10
43	-0.27	1.07	1.11
44	-0.28	1.12	1.13
45	-0.32	1.16	1.17
46	-0.34	1.23	1.21
47	-0.33	1.27	1.25
48	-0.34	1.19	1.20
49	-0.31	1.09	1.10
50	-0.28	1.06	1.06



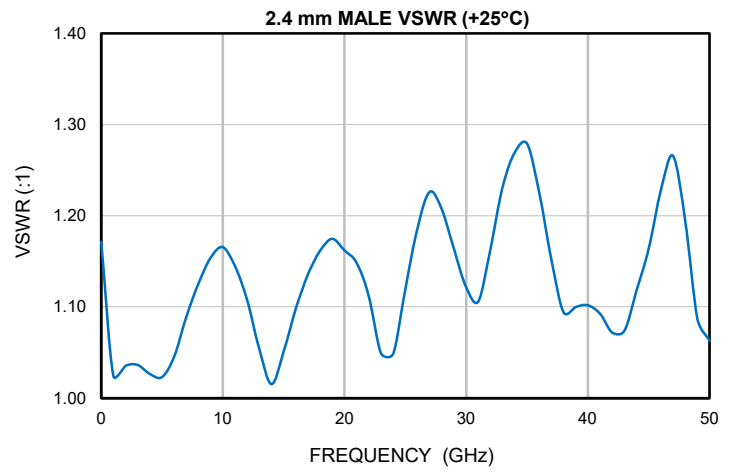
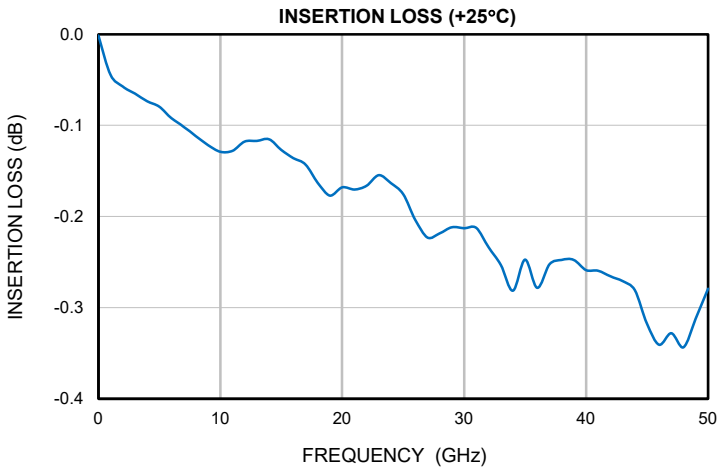
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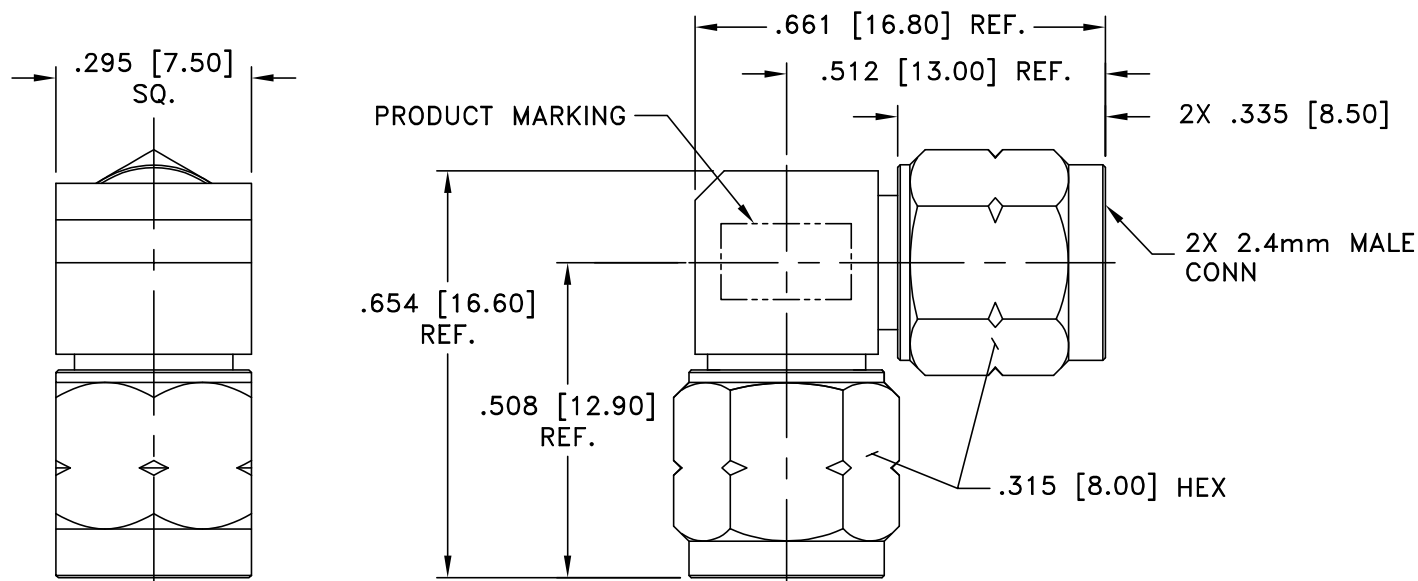


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IF/RF MICROWAVE COMPONENTS

## Typical Performance Curves





Weight: 18.5 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl.  $\pm .030$ ; 3 Pl.  $\pm .015$  Inch

Notes:

Case material: Stainless steel.  
Case Finish: Passivated.

**Mini-Circuits®**  
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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	-45° C to 125° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-45° C to 125° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-45° to 125°C, 5 Cycles	MIL-STD-202, Method 107, Condition B except over -45° to 125°C
Connector Durability	500 mating/unmating cycles	MIL-PRF-39012E, PARAGRAPH 4.6.12