

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

THE BIG DEAL

IIII Mini-Circuits ■

- Ultra-Wideband, DC-50 GHz
- Flat Rsponse
- Low Insertion loss, 0.15 dB
- Excellent VSWR, 1.04:1



Generic photo used for illustration purposes only

| Model No. | 24M-24M+ | | |
|------------|----------------------|--|--|
| Case Style | DJ2479 | | |
| Connectors | 2.4 mm-M to 2.4 mm-M | | |

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

APPLICATIONS

· Interconnection of RF cable and equipment

PRODUCT OVERVIEW

Mini-Circuits' 24M-24M+ is a coaxial 2.4 mm-M 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 24M-24M+ features passivated stainless steel construction and measures only 0.68" (I) x 0.36" (dia.).

KEY FEATURES

| Features | Advantages | | |
|---|--|--|--|
| Wideband, DC to 50 GHz | Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use. | | |
| Excellent VSWR, 1.04:1 | Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range. | | |
| Low Insertion Loss, 0.15 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. | | |

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ELECTRICAL SPECIFICATIONS AT 25°C

| Parameter | Condition (GHz) | Min. | Тур. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range | _ | DC | _ | 50 | GHz |
| | DC - 5 | _ | 0.04 | 0.4 | |
| | 5 - 10 | _ | 0.08 | 0.4 | |
| Insertion Loss | 10 - 20 | _ | 0.10 | 0.4 | dB |
| | 20 - 40 | _ | 0.15 | 0.4 | |
| | 40 - 50 | _ | 0.21 | 0.4 | |
| | DC - 5 | _ | 1.02 | 1.15 | |
| | 5 - 10 | _ | 1.02 | 1.15 | |
| VSWR | 10 - 20 | _ | 1.01 | 1.15 | :1 |
| | 20 - 40 | _ | 1.04 | 1.15 | |
| | 40 - 50 | _ | 1.06 | 1.15 | |

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.



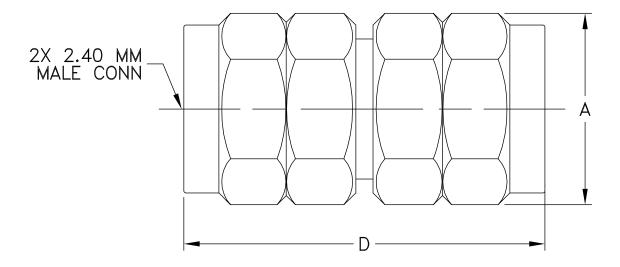
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COAXIAL CONNECTIONS

Mini-Circuits

| Connector 1 | 2.4 mm-M | | |
|-------------|----------|--|--|
| Connector 2 | 2.4 mm-M | | |

OUTLINE DRAWING



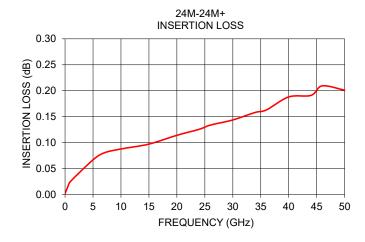
OUTLINE DIMENSIONS (Inches)

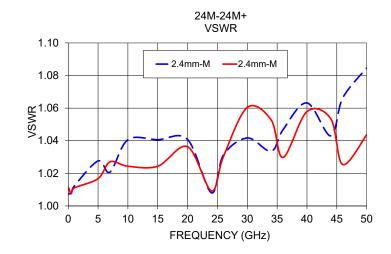
| wt | E | D | С | В | Α |
|-------|---|-------|---|---|-------|
| grams | | 0.685 | | | 0.362 |
| 6.0 | | 17.4 | | | 9.2 |

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TYPICAL PERFORMANCE DATA AND CHARTS

| Frequency (GHz) | Insertion Loss (dB) | VSWR (:1) | | |
|--------------------|------------------------|--------------|-------------|--|
| | | 2.4 mm-Male | 2.4 mm-Male | |
| 0.01 | 0.00 | 1.01 | 1.01 | |
| 0.5 | 0.02 | 1.01 | 1.01 | |
| 1 | 0.03 | 1.01 | 1.01 | |
| 5 | 0.07 | 1.03 | 1.02 | |
| 7 | 0.08 | 1.02 | 1.03 | |
| 10 | 0.09 | 1.04 | 1.02 | |
| 15 | 0.10 | 1.04 | 1.02 | |
| 20 | 0.11 | 1.04 | 1.04 | |
| 24 | 0.13 | 1.01 | 1.01 | |
| 26 | 0.13 | 1.03 | 1.03 | |
| 30 | 0.14 | 1.04 | 1.06 | |
| 34 | 0.16 | 1.03 | 1.05 | |
| 36 | 0.16 | 1.05 | 1.03 | |
| 40 | 0.19 | 1.06 | 1.06 | |
| 44 | 0.19 | 1.04 | 1.05 | |
| 46 | 0.21 | 1.07 | 1.03 | |
| 50 | 0.20 | 1.08 | 1.04 | |





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

