

35M-35M50+

50Ω DC to 34 GHz 3.5 mm-Male to 3.5 mm-Male

THE BIG DEAL

- · Ultra-Wideband, DC-34 GHz
- Flat Response
- Low Insertion Loss, 0.10 dB
- Excellent VSWR, 1.03:1



Generic photo used for illustration purposes only

| Model No. | No. 35M-35M50+ | | |
|------------|----------------------|--|--|
| Case Style | DJ1863 | | |
| Connectors | 3.5 mm-M to 3.5 mm-M | | |

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

APPLICATIONS

· Interconnection of RF cable and equipment

PRODUCT OVERVIEW

Mini-Circuits' 35M-35M50+ is a coaxial 3.5mm-M to 3.5mm-M adapter supporting a wide range of applications from DC to 34 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The 35M-35M50+ features rugged, passivated stainless steel construction and measures only 0.86" (I) x 0.36" (dia.).

KEY FEATURES

| Features | Advantages | | | |
|---|--|--|--|--|
| Ultra-Wideband, DC to 34 GHz | Wide frequency range provides application flexibility and makes this model ideal for broadband 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, 0.10 dB | Provides excellent signal power transmission from input to output. | | | |
| 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. | | | |



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ELECTRICAL SPECIFICATIONS AT 25°C

| Parameter | Condition (GHz) | Min. | Тур. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range | - | DC | _ | 34 | GHz |
| Insertion Loss | DC-34 | _ | 0.10 | _ | dB |
| | DC-18 | _ | 1.02 | 1.25 | |
| VSWR | DC-26 | _ | 1.02 | 1.25 | :1 |
| | DC-34 | _ | 1.03 | 1.25 | |

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.

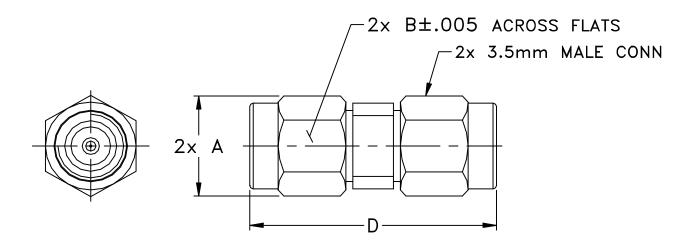


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COAXIAL CONNECTIONS

| Connector 1 | 3.5 mm-M | | |
|-------------|----------|--|--|
| Connector 2 | 3.5 mm-M | | |

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inches)

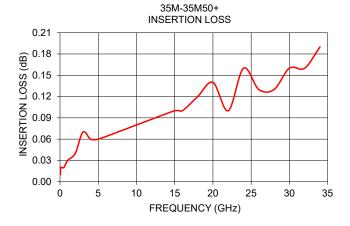
| wt | E | D | С | В | Α |
|-------|---|-------|---|-------|------|
| grams | | 0.86 | | 0.312 | 0.36 |
| 5.3 | | 21.80 | | 7.93 | 9.14 |

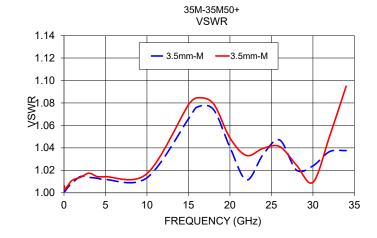
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TYPICAL PERFORMANCE DATA AND CHARTS

| Frequency (GHz) | Insertion Loss (dB) | VSWR (:1) | | |
|--------------------|------------------------|--------------|-------------|--|
| | | 3.5 mm-Male | 3.5 mm-Male | |
| 0.05 | 0.01 | 1.00 | 1.01 | |
| 0.10 | 0.02 | 1.00 | 1.00 | |
| 0.50 | 0.02 | 1.01 | 1.01 | |
| 1.00 | 0.03 | 1.01 | 1.01 | |
| 2.00 | 0.04 | 1.01 | 1.01 | |
| 3.00 | 0.07 | 1.01 | 1.02 | |
| 4.00 | 0.06 | 1.01 | 1.01 | |
| 5.00 | 0.06 | 1.01 | 1.01 | |
| 10.00 | 0.08 | 1.01 | 1.02 | |
| 15.00 | 0.10 | 1.07 | 1.08 | |
| 16.00 | 0.10 | 1.08 | 1.08 | |
| 18.00 | 0.12 | 1.07 | 1.08 | |
| 20.00 | 0.14 | 1.04 | 1.05 | |
| 22.00 | 0.10 | 1.01 | 1.03 | |
| 24.00 | 0.16 | 1.03 | 1.04 | |
| 26.00 | 0.13 | 1.05 | 1.04 | |
| 28.00 | 0.13 | 1.02 | 1.02 | |
| 30.00 | 0.16 | 1.02 | 1.01 | |
| 32.00 | 0.16 | 1.04 | 1.05 | |
| 34.00 | 0.19 | 1.04 | 1.09 | |





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

