



Mini-Circuits

COAXIAL

## Adapter

24F-35F+

50Ω DC to 34.5 GHz 2.4 mm-Female to 3.5 mm-Female

## KEY FEATURES

- Ultra-Wideband, DC to 34.5 GHz
- Low Insertion Loss, 0.10 dB Typ.
- Excellent VSWR, 1.07:1 Typ.
- Straight Body



Generic photo used for illustration purposes only

## PRODUCT OVERVIEW

Mini-Circuits' 24F-35F+ is a coaxial 2.4 mm-Female to 3.5 mm-Female adapter supporting a wide range of applications from DC to 34.5 GHz. This model provides excellent VSWR and low insertion loss versus frequency. The 24F-35F+ features passivated stainless-steel construction and measures only 0.83" in length. These adapters are used to enable connections between connector types that would otherwise not mate.

ELECTRICAL SPECIFICATIONS<sup>1</sup> AT +25 °C

| Parameter       | Frequency (GHz) | Min. | Typ. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range |                 | DC   |      | 34.5 | GHz   |
| Insertion Loss  | DC-26.5         | -    | 0.08 | 0.45 | dB    |
|                 | 26.5-34.5       | -    | 0.16 | 0.45 |       |
| VSWR            | DC-26.5         | -    | 1.05 | 1.25 | :1    |
|                 | 26.5-34.5       | -    | 1.16 | 1.33 |       |

1. Specifications are tested to minimum frequency of 0.01 GHz.

ABSOLUTE MAXIMUM RATINGS<sup>2</sup>

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

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





COAXIAL

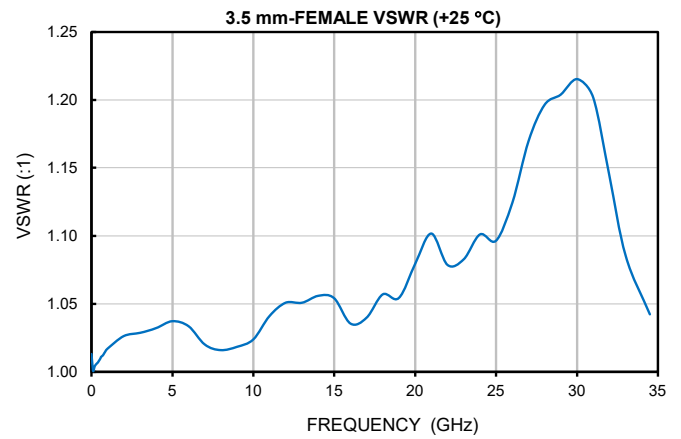
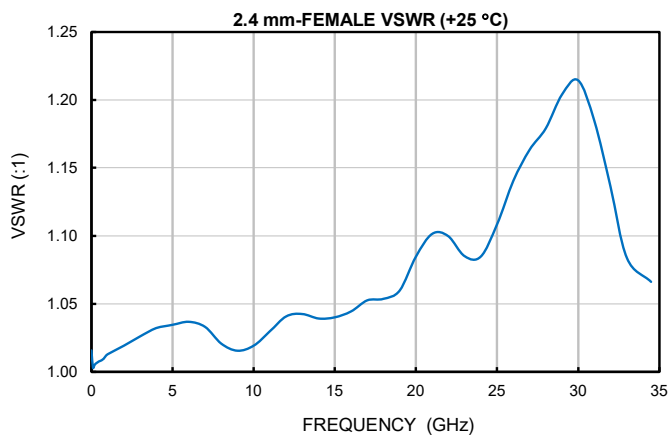
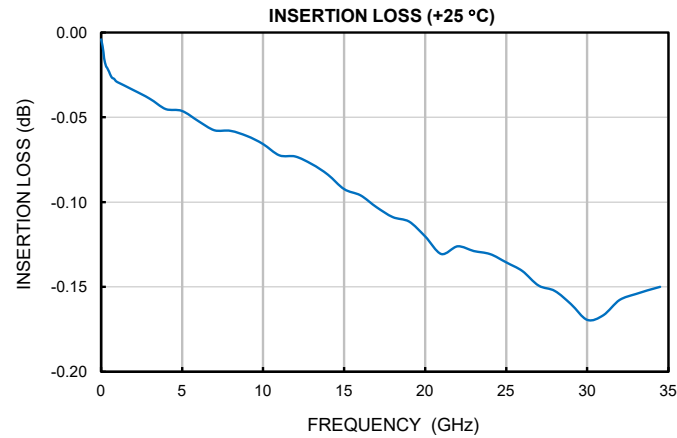
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50 $\Omega$  DC to 34.5 GHz 2.4 mm-Female to 3.5 mm-Female

## TYPICAL PERFORMANCE GRAPHS

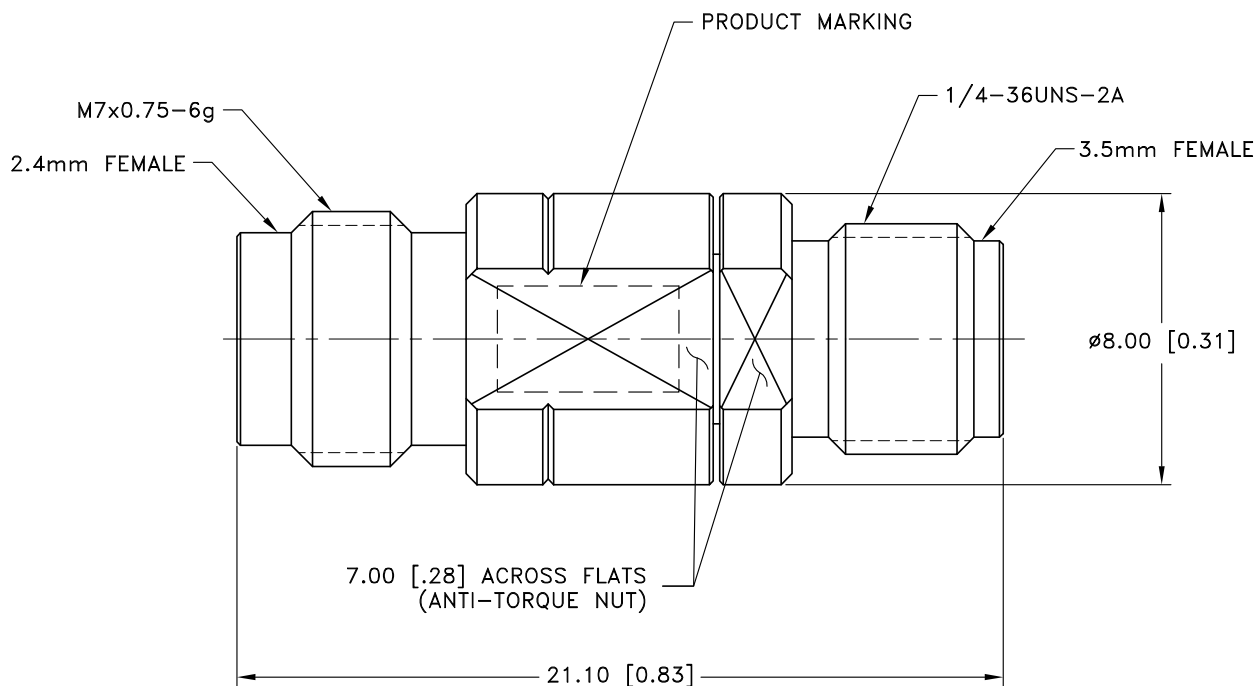




## CONNECTOR SPECIFICATIONS

| Description    | Connector 1   | Connector 2   |
|----------------|---------------|---------------|
| Connector Type | 2.4 mm-Female | 3.5 mm-Female |
| Orientation    | Straight      | Straight      |

## CASE STYLE DRAWING



Weight: 4.2 grams

Dimensions are in mm [inches]. Tolerances: 2 Pl ± .40 mm

## PRODUCT MARKING\*: 24F-35F+

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



ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

CLICK HERE

|                           |                                              |
|---------------------------|----------------------------------------------|
| Performance Data & Graphs | Data                                         |
|                           | Graphs                                       |
|                           | S-Parameter (S2P Files) Data Set (.zip file) |
| Case Style                | DJ3746                                       |
| RoHS Status               | Compliant                                    |
| Environmental Ratings     | ENV152                                       |

## 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 [www.minicircuits.com/terms/viewterm.html](http://www.minicircuits.com/terms/viewterm.html).

**Adaptor 2.4mm-Female to 3.5mm-Female****24F-35F+***Typical Performance Data*

| FREQ. | INSERTION LOSS | 2.4mm-FEMALE<br>VSWR | 3.5mm-FEMALE<br>VSWR |
|-------|----------------|----------------------|----------------------|
| (GHz) | (dB)           | (:1)                 | (:1)                 |
| 0.01  | 0.00           | 1.02                 | 1.01                 |
| 0.10  | 0.01           | 1.00                 | 1.00                 |
| 0.20  | 0.02           | 1.01                 | 1.00                 |
| 0.30  | 0.02           | 1.01                 | 1.01                 |
| 0.40  | 0.02           | 1.01                 | 1.01                 |
| 0.50  | 0.02           | 1.01                 | 1.01                 |
| 0.60  | 0.03           | 1.01                 | 1.01                 |
| 0.70  | 0.03           | 1.01                 | 1.01                 |
| 0.80  | 0.03           | 1.01                 | 1.01                 |
| 1.00  | 0.03           | 1.01                 | 1.02                 |
| 2.00  | 0.03           | 1.02                 | 1.03                 |
| 3.00  | 0.04           | 1.03                 | 1.03                 |
| 4.00  | 0.05           | 1.03                 | 1.03                 |
| 5.00  | 0.05           | 1.03                 | 1.04                 |
| 6.00  | 0.05           | 1.04                 | 1.03                 |
| 7.00  | 0.06           | 1.03                 | 1.02                 |
| 8.00  | 0.06           | 1.02                 | 1.02                 |
| 9.00  | 0.06           | 1.02                 | 1.02                 |
| 10.00 | 0.07           | 1.02                 | 1.02                 |
| 11.00 | 0.07           | 1.03                 | 1.04                 |
| 12.00 | 0.07           | 1.04                 | 1.05                 |
| 13.00 | 0.08           | 1.04                 | 1.05                 |
| 14.00 | 0.08           | 1.04                 | 1.06                 |
| 15.00 | 0.09           | 1.04                 | 1.05                 |
| 16.00 | 0.10           | 1.04                 | 1.04                 |
| 17.00 | 0.10           | 1.05                 | 1.04                 |
| 18.00 | 0.11           | 1.05                 | 1.06                 |
| 19.00 | 0.11           | 1.06                 | 1.05                 |
| 20.00 | 0.12           | 1.08                 | 1.08                 |
| 21.00 | 0.13           | 1.10                 | 1.10                 |
| 22.00 | 0.13           | 1.10                 | 1.08                 |
| 23.00 | 0.13           | 1.08                 | 1.08                 |
| 24.00 | 0.13           | 1.08                 | 1.10                 |
| 25.00 | 0.14           | 1.11                 | 1.10                 |
| 26.00 | 0.14           | 1.14                 | 1.12                 |
| 27.00 | 0.15           | 1.16                 | 1.17                 |
| 28.00 | 0.15           | 1.18                 | 1.20                 |
| 29.00 | 0.16           | 1.20                 | 1.20                 |
| 30.00 | 0.17           | 1.21                 | 1.22                 |
| 31.00 | 0.17           | 1.18                 | 1.20                 |
| 32.00 | 0.16           | 1.14                 | 1.14                 |
| 33.00 | 0.15           | 1.08                 | 1.09                 |
| 34.50 | 0.15           | 1.07                 | 1.04                 |



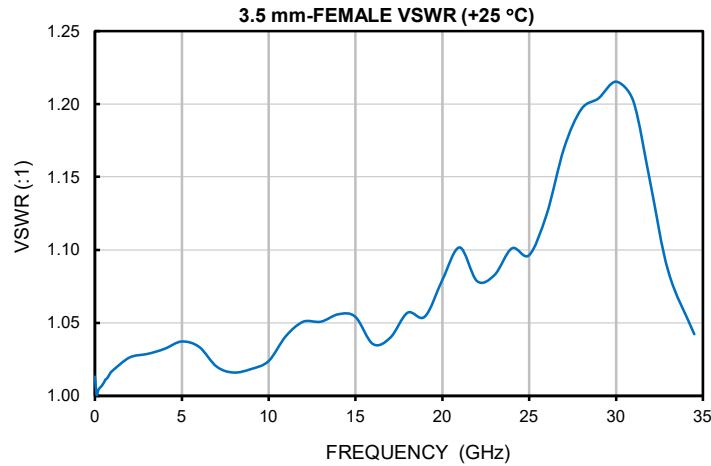
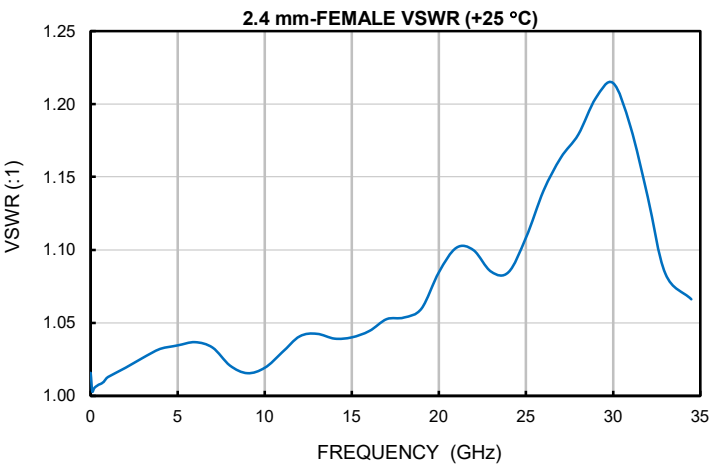
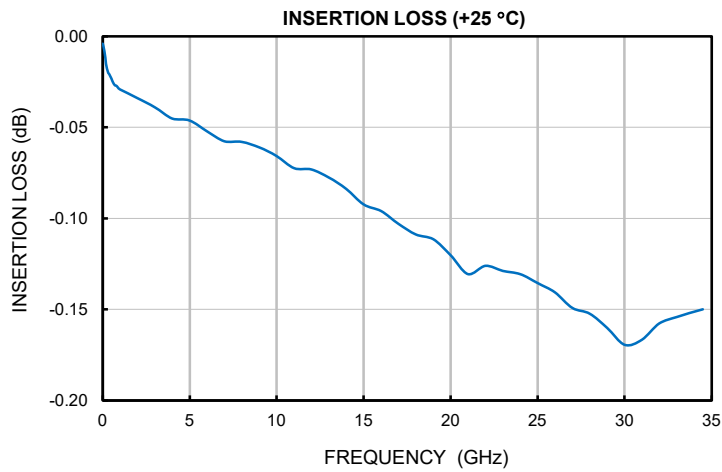
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The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)

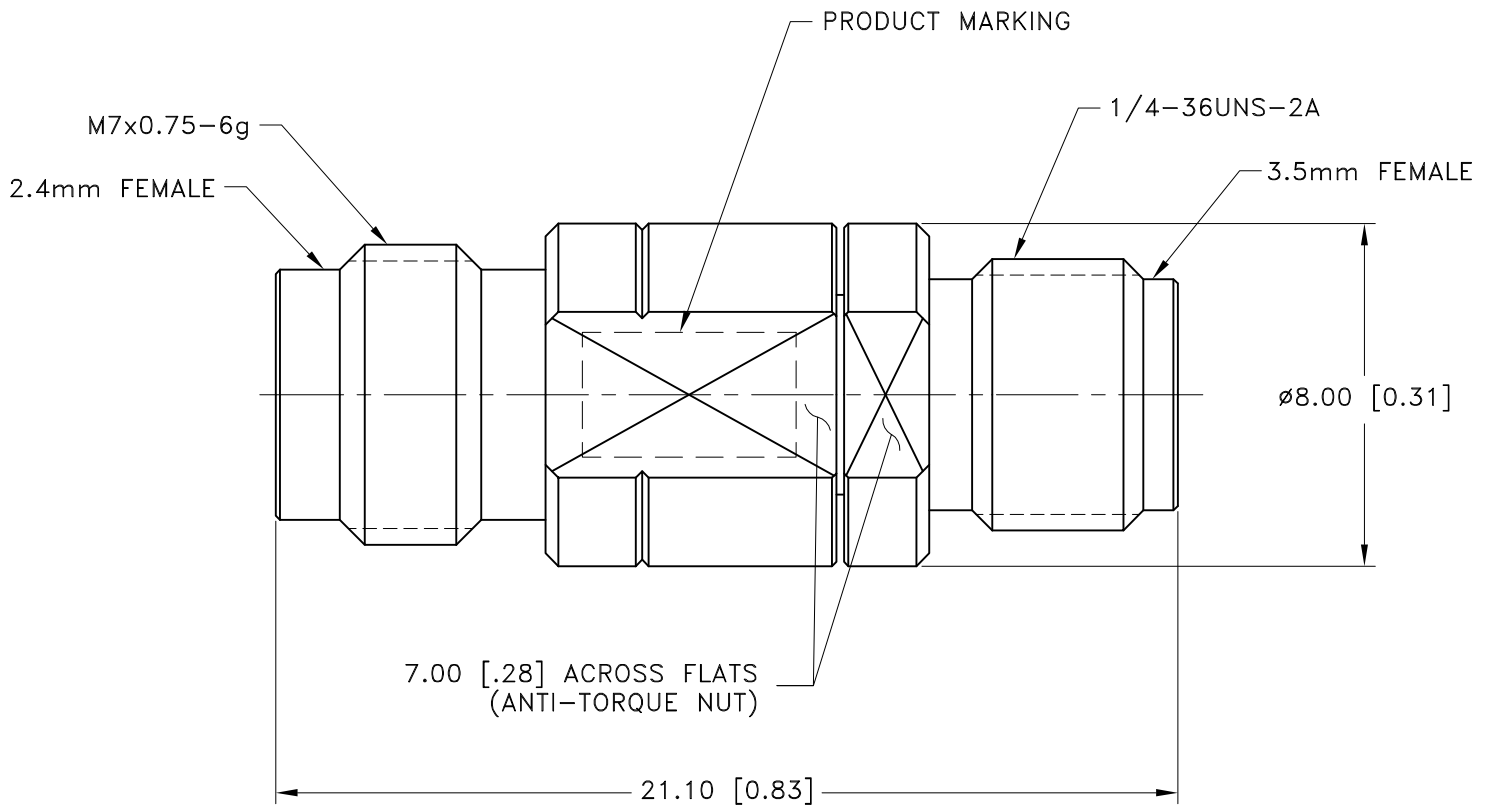


IF/RF MICROWAVE COMPONENTS

REV. OR  
24F-35F+  
8/14/2025  
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Typical Performance Curves





Weight: 4.2 grams

Dimensions are in mm [inches]. Tolerances: 2 Pl ± .40 mm

### Notes:

1. Case material: Stainless Steel.
2. Finish: Passivation.



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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° to +125° C                             | Individual Model Data Sheet                                          |
| Storage Temperature   | -45° to +125° C                             | Individual Model Data Sheet                                          |
| Thermal Shock         | -55° to +125° C, 5cycles, 15 min dwell time | MIL-STD-202, Method 107, Condition B except -55° C instead of -65° C |
| Connector Durability  | 500 mating/unmating cycles                  | MIL-PRF-39012E, PARAGRAPH 4.6.12                                     |