

**KEY FEATURES**

- Ultra-wideband, DC to 67GHz
- Low Insertion Loss, 0.1 dB Typ.
- Straight Body
- Excellent VSWR, 1.06:1 Typ.

*Generic photo used for illustration purposes only***PRODUCT OVERVIEW**

Mini-Circuits' 10M-185M+ is a coaxial 1.0mm Male to 1.85mm Male adapter supporting a wide range of applications from DC to 67 GHz. This model provides excellent VSWR and low insertion loss versus frequency. The 10M-185M+ features passivated stainless-steel construction and measures only 0.69" in length.

**ELECTRICAL SPECIFICATIONS AT +25°C**

| Parameter       | Condition (GHz) | Min. | Typ. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range |                 | DC   |      | 67   | GHz   |
| Insertion Loss  | 0.01-30         | —    | 0.08 | 0.53 | dB    |
|                 | 30-40           | —    | 0.07 | 0.53 |       |
|                 | 40-50           | —    | 0.10 | 0.53 |       |
|                 | 50-67           | —    | 0.11 | 0.53 |       |
| VSWR            | 0.01-30         | —    | 1.07 | 1.25 | :1    |
|                 | 30-40           | —    | 1.06 | 1.25 |       |
|                 | 40-50           | —    | 1.06 | 1.25 |       |
|                 | 50-67           | —    | 1.07 | 1.25 |       |

Absolute Maximum Ratings are on page 3.



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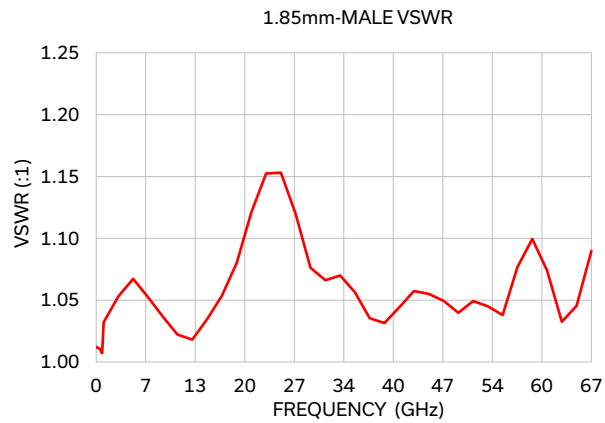
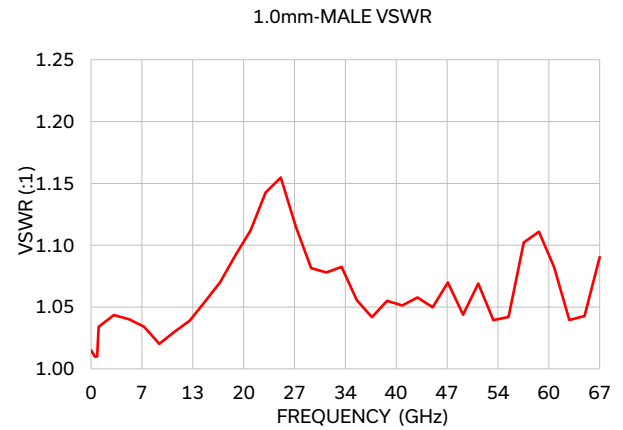
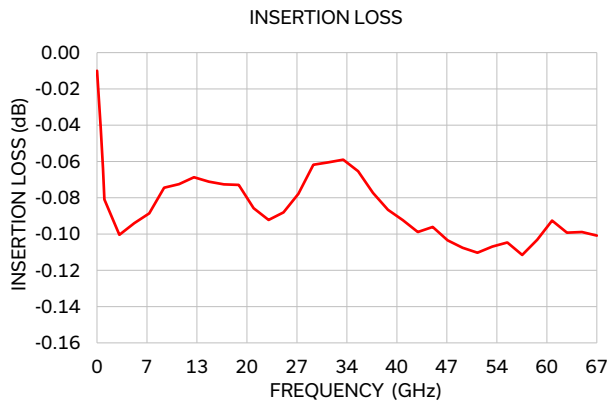
COAXIAL

# Adapter

**10M-185M+**

50 $\Omega$  DC to 67 GHz 1.0mm-Male to 1.85mm-Male

## TYPICAL PERFORMANCE GRAPHS





COAXIAL

# Adapter

10M-185M+

Mini-Circuits

50Ω DC to 67 GHz 1.0mm-Male to 1.85mm-Male

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

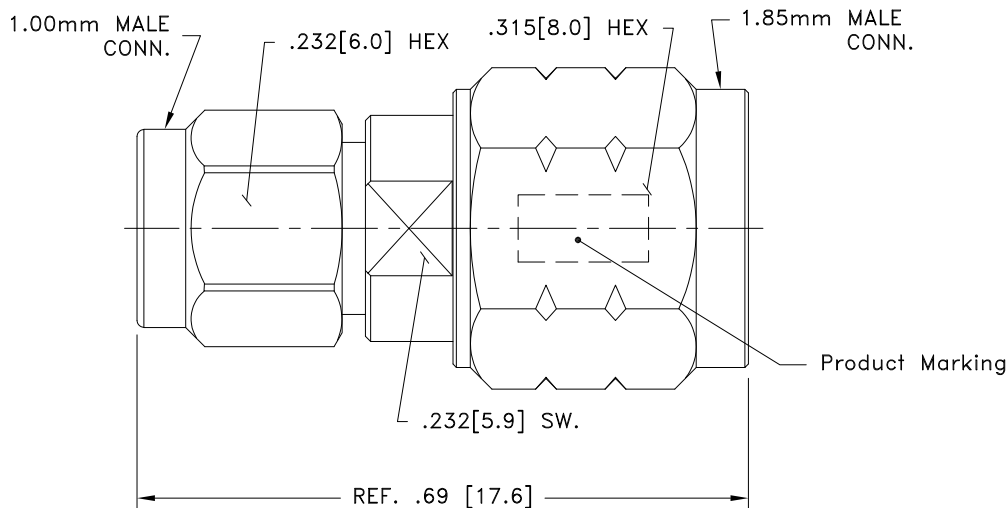
| Parameter                  | Ratings          |
|----------------------------|------------------|
| Operating Case Temperature | +10 °C to +40 °C |
| Storage Temperature        | +10 °C to +40 °C |

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

## CONNECTOR SPECIFICATIONS

| Description    | Connector 1 | Connector 2 |
|----------------|-------------|-------------|
| Connector Type | 1.0mm Male  | 1.85mm Male |
| Orientation    | Straight    | Straight    |

## CASE STYLE DRAWING



Weight: 3.8 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl. ±.03; 3 Pl. ±.015 inches

## PRODUCT MARKING\*: 10M-185M+

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

## ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

|                       |                                                                |
|-----------------------|----------------------------------------------------------------|
| Performance           | Data<br>Graphs<br>S-Parameter (S2P Files) Data Set (.zip file) |
| Case Style            | DJ3474-6                                                       |
| RoHs Status           | Compliant                                                      |
| Environmental Ratings | ENV127T1                                                       |

## NOTES

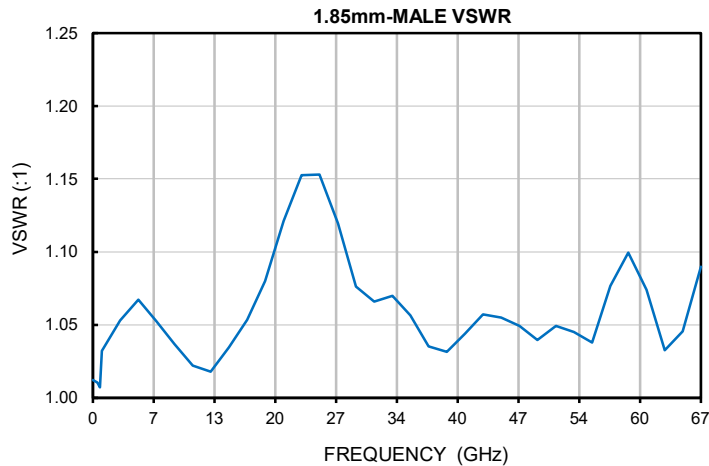
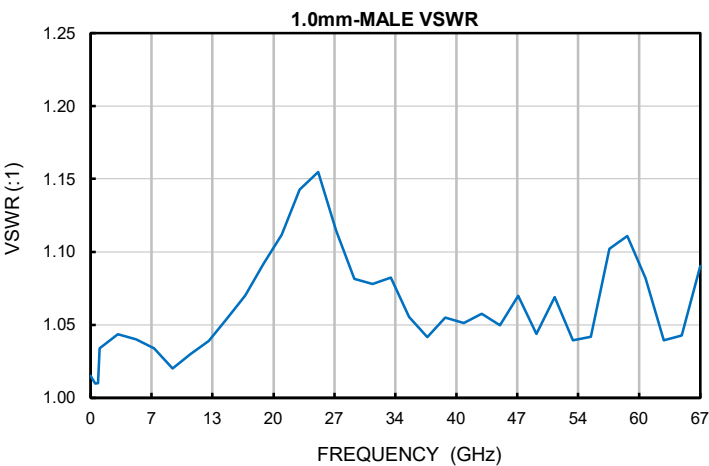
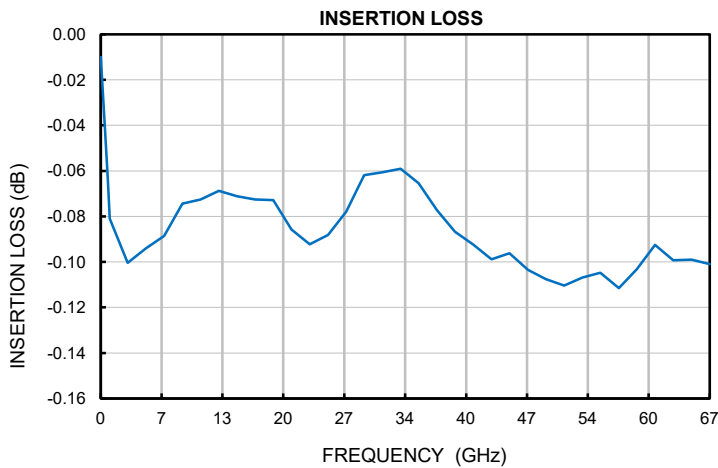
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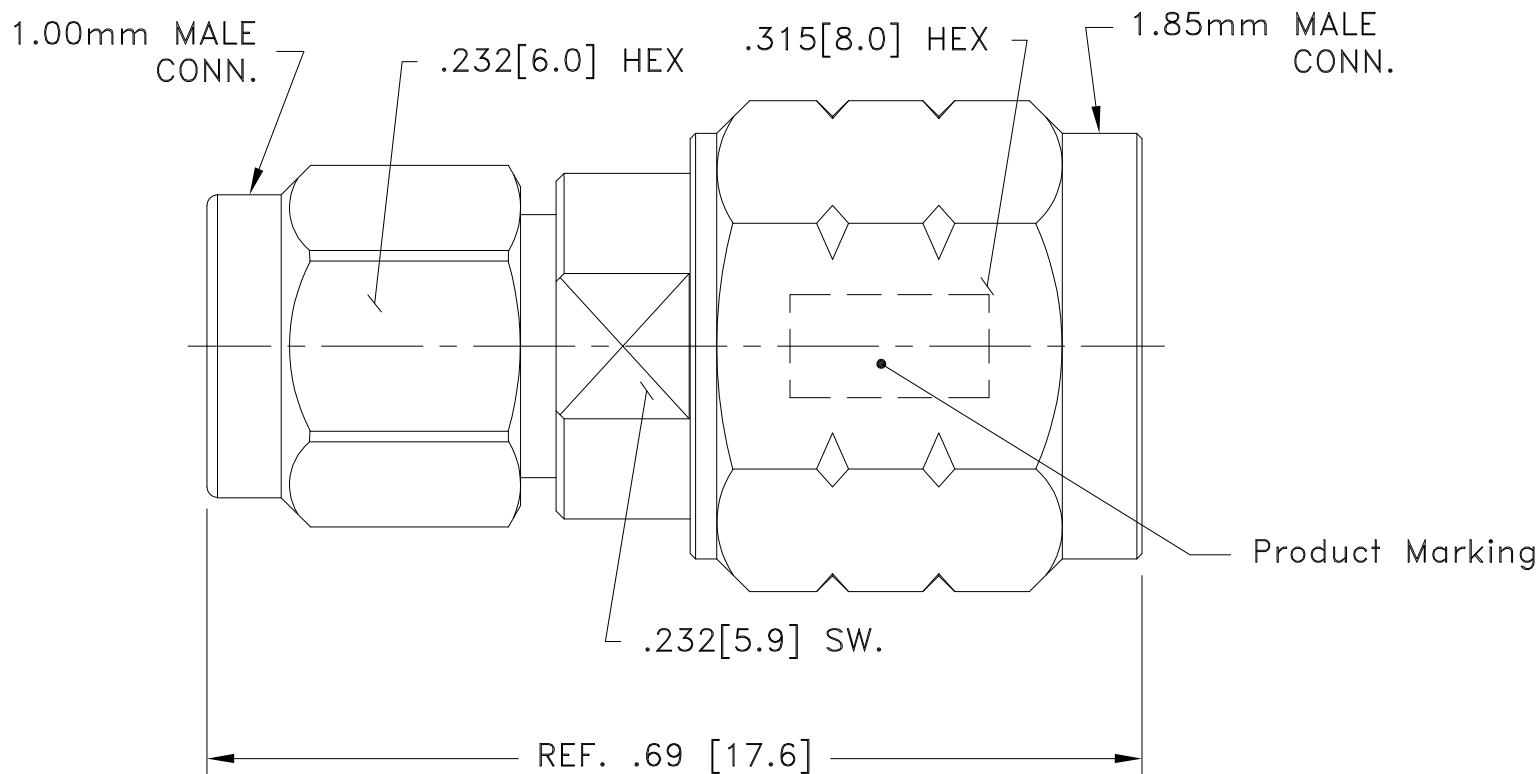


**Adaptor 1.0mm-Male to 1.85mm-Male****10M-185M+***Typical Performance Data*

| FREQ. | INSERTION LOSS | 1.0mm-MALE<br>VSWR | 1.85mm-MALE<br>VSWR |
|-------|----------------|--------------------|---------------------|
| (GHz) | (dB)           | (:1)               | (:1)                |
| 0.01  | 0.01           | 1.02               | 1.01                |
| 0.5   | 0.04           | 1.01               | 1.01                |
| 0.8   | 0.06           | 1.01               | 1.01                |
| 1.0   | 0.08           | 1.03               | 1.03                |
| 3.0   | 0.10           | 1.04               | 1.05                |
| 5.0   | 0.09           | 1.04               | 1.07                |
| 7.0   | 0.09           | 1.03               | 1.05                |
| 9.0   | 0.07           | 1.02               | 1.04                |
| 11.0  | 0.07           | 1.03               | 1.02                |
| 13.0  | 0.07           | 1.04               | 1.02                |
| 15.0  | 0.07           | 1.05               | 1.03                |
| 17.0  | 0.07           | 1.07               | 1.05                |
| 19.0  | 0.07           | 1.09               | 1.08                |
| 21.0  | 0.09           | 1.11               | 1.12                |
| 23.0  | 0.09           | 1.14               | 1.15                |
| 25.0  | 0.09           | 1.15               | 1.15                |
| 27.0  | 0.08           | 1.11               | 1.12                |
| 29.0  | 0.06           | 1.08               | 1.08                |
| 31.0  | 0.06           | 1.08               | 1.07                |
| 33.0  | 0.06           | 1.08               | 1.07                |
| 35.0  | 0.07           | 1.06               | 1.06                |
| 37.0  | 0.08           | 1.04               | 1.04                |
| 39.0  | 0.09           | 1.06               | 1.03                |
| 41.0  | 0.09           | 1.05               | 1.04                |
| 43.0  | 0.10           | 1.06               | 1.06                |
| 45.0  | 0.10           | 1.05               | 1.06                |
| 47.0  | 0.10           | 1.07               | 1.05                |
| 49.0  | 0.11           | 1.04               | 1.04                |
| 51.0  | 0.11           | 1.07               | 1.05                |
| 53.0  | 0.11           | 1.04               | 1.05                |
| 55.0  | 0.10           | 1.04               | 1.04                |
| 57.0  | 0.11           | 1.10               | 1.08                |
| 59.0  | 0.10           | 1.11               | 1.10                |
| 61.0  | 0.09           | 1.08               | 1.07                |
| 63.0  | 0.10           | 1.04               | 1.03                |
| 65.0  | 0.10           | 1.04               | 1.05                |
| 67.0  | 0.10           | 1.09               | 1.09                |

Typical Performance Curves





Weight: 3.8 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl.  $\pm .03$ ; 3 Pl.  $\pm .015$  inches

Notes:

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



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

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 | +10° to +40° C                                | Individual Model Data Sheet      |
| Storage Temperature   | +10° to +40° C                                | Individual Model Data Sheet      |
| Thermal shock         | +10° C to +40° C, 5 cycles, 15 min dwell time | MIL-STD-202, Method 107          |
| Connector Durability  | 500 mating/unmating cycles                    | MIL-PRF-39012E, PARAGRAPH 4.6.12 |