

**KEY FEATURES**

- V-band frequency band, 50-70 GHz
- Low Insertion Loss, 0.4 dB Typ.
- Excellent VSWR, 1.1:1 Typ.
- Compact right-angle design
- Precision UG385/U anti-cocking waveguide flange
- 1.85 mm-Female connector



Generic photo used for illustration purposes only

PRODUCT OVERVIEW

Mini-Circuits' WR15-185R+ is a waveguide to coaxial adapter operating from 50 to 70 GHz. This product features a WR15 waveguide interface with a precision standard UG385/U anti-cocking flange to 1.85 mm-Female coaxial connector. The WR15-185R+ features aluminum alloy construction and a gold-plated finish to ensure repeatable RF performance. This right-angle adapter has applications in R&D, over-the-air (OTA) mmWave test laboratories as well as in V-Band communication and SATCOM systems. Mounting screws are included with product purchase.

ELECTRICAL SPECIFICATIONS AT +25°C

| Parameter | Frequency (GHz) | Min. | Typ. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range | | 50 | | 70 | GHz |
| Insertion Loss | 50-60 | | 0.4 | 1.0 | dB |
| | 60-70 | | 0.4 | 1.0 | |
| VSWR | 50-60 | | 1.1 | 1.6 | :1 |
| | 60-70 | | 1.1 | 1.6 | |

ABSOLUTE MAXIMUM RATINGS¹

| | |
|----------------------------|-----------------|
| Operating Case Temperature | +10°C to +40°C |
| Storage Temperature | -55°C to +100°C |

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



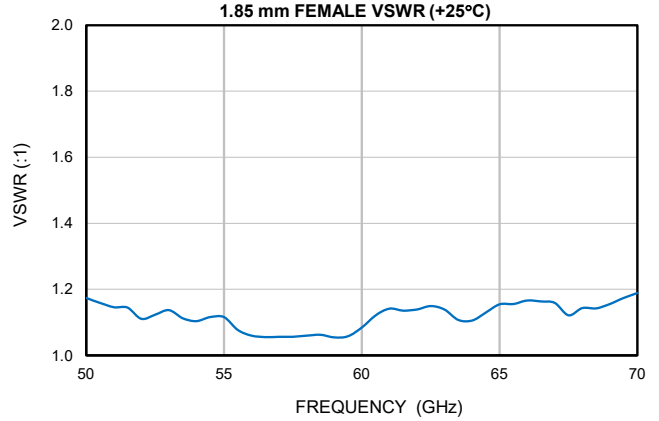
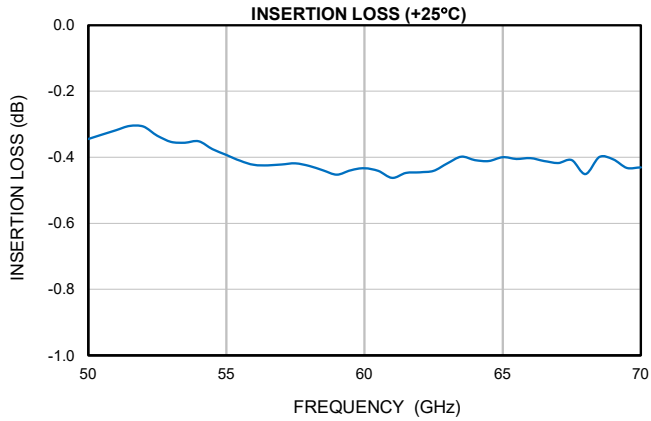
WAVEGUIDE/COAXIAL

Adapter

WR15-185R+

50Ω 50 to 70 GHz Right-Angle 1.85 mm-Female to WR15 UG385/U Flange

TYPICAL PERFORMANCE GRAPHS



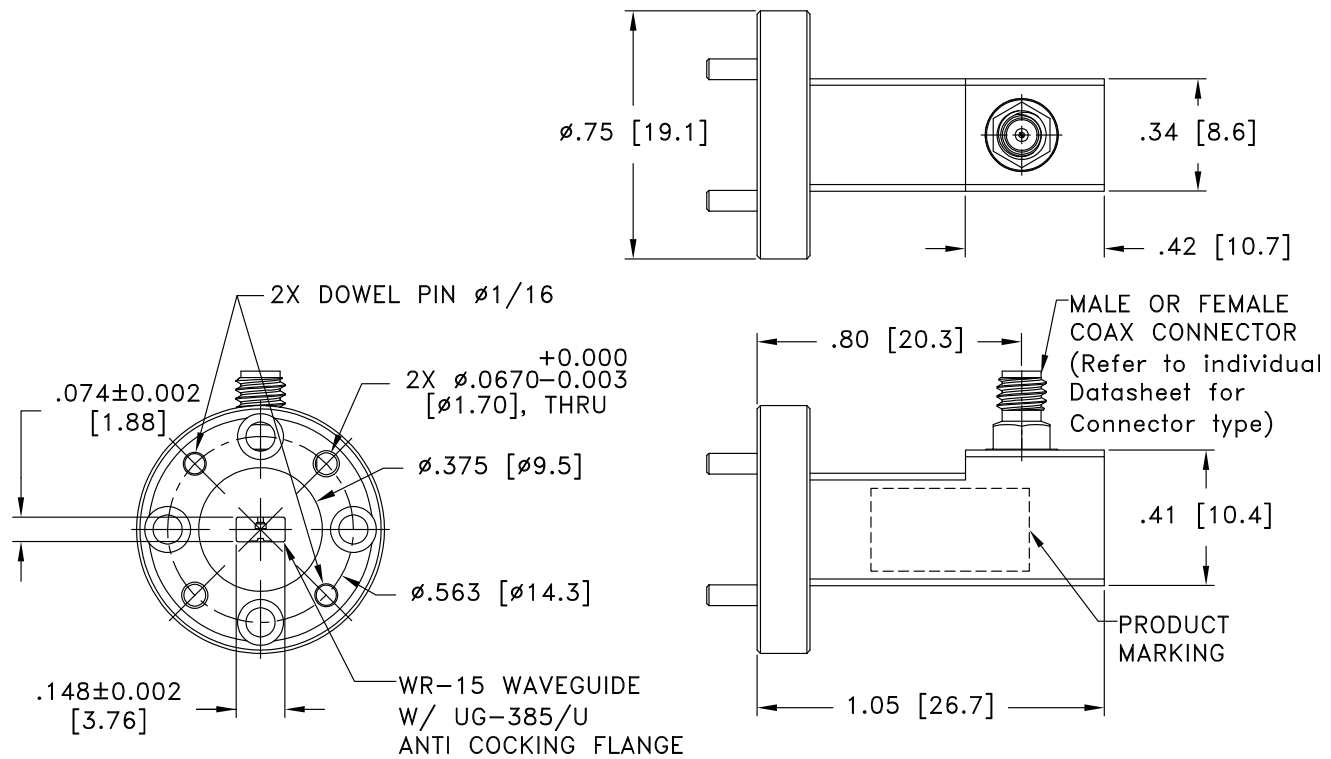


Adapter

CONNECTOR SPECIFICATIONS

| Description | Connector 1 | Connector 2 |
|----------------|---------------------|----------------|
| Connector Type | WR15 UG385/U Flange | 1.85 mm Female |
| Orientation | Straight | Right-Angle |

CASE STYLE DRAWING



Weight: 11 grams

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

PRODUCT MARKING*: WR15-185R+

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



WAVEGUIDE/COAXIAL

Adapter

WR15-185R+

Mini-Circuits

50Ω 50 to 70 GHz Right-Angle 1.85 mm-Female to WR15 UG385/U Flange

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD [CLICK HERE](#)

| | |
|---------------------------|--|
| Performance Data & Graphs | Data Graphs S-Parameter (S2P Files) Data Set (.zip file) |
| Case Style | UW3675 |
| RoHS Status | Compliant |
| Environmental Ratings | ENV145 |

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

