



## KEY FEATURES

- Full W-band frequency band, 75-110 GHz
- Low Insertion Loss, 0.6 dB Typ.
- Excellent VSWR, 1.3:1 Typ.
- Precision UG387/U anti-cocking waveguide flange
- 1.0 mm Female connector



Generic photo used for illustration purposes only

## HANDLING INSTRUCTIONS

1.0 mm connectors require specific handling and torque values. See Mini-Circuits Application Note AN-71-001 for detail.

## PRODUCT OVERVIEW

Mini-Circuits' WR10-10+ is a waveguide-to-coax adapter operating from 75 to 110 GHz (W-band). This product features a WR10 waveguide interface with a precision standard UG387/U anti-cocking flange-to-1.0 mm Female coaxial connector. The WR10-10+ features aluminum alloy construction and a gold-plated finish to ensure repeatable RF performance. This adapter has applications in R&D, production, over-the-air (OTA) mmWave test laboratories as well as in 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		75	-	110	GHz
Insertion Loss	75-90	-	0.5	1.5	dB
	90-100	-	0.6	1.5	
	100-110	-	0.7	1.5	
VSWR	75-90	-	1.3	2.0	:1
	90-100	-	1.3	2.0	
	100-110	-	1.7	2.0	

ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Operating Case Temperature	+10° C to +40° C
Storage Temperature	-40° C to +85° C

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



WAVEGUIDE TO COAX

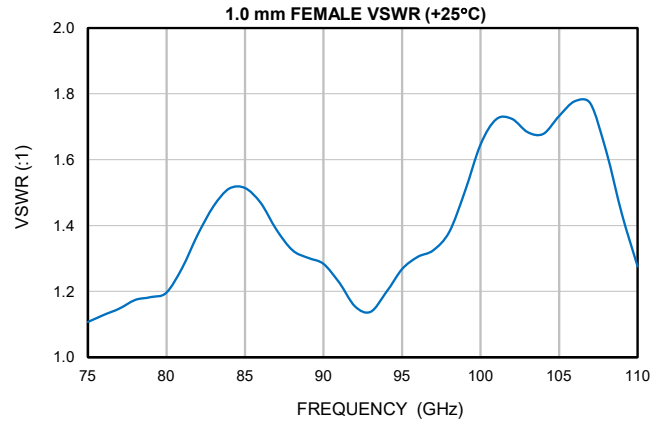
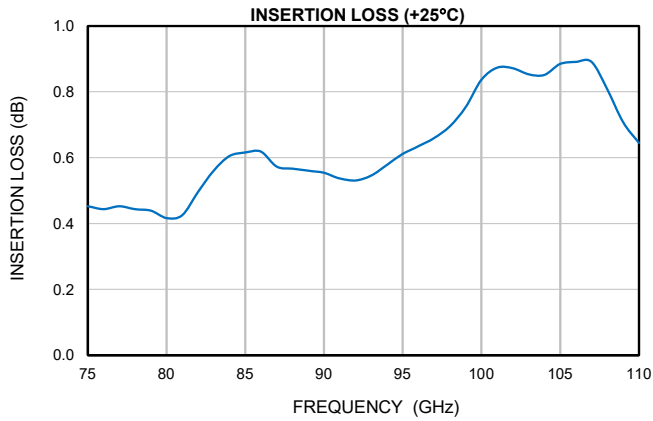
# Adapter

**WR10-10+**

Mini-Circuits

50Ω 75 to 110 GHz 1.0 mm Female to WR10 UG387/U Flange

## TYPICAL PERFORMANCE GRAPHS



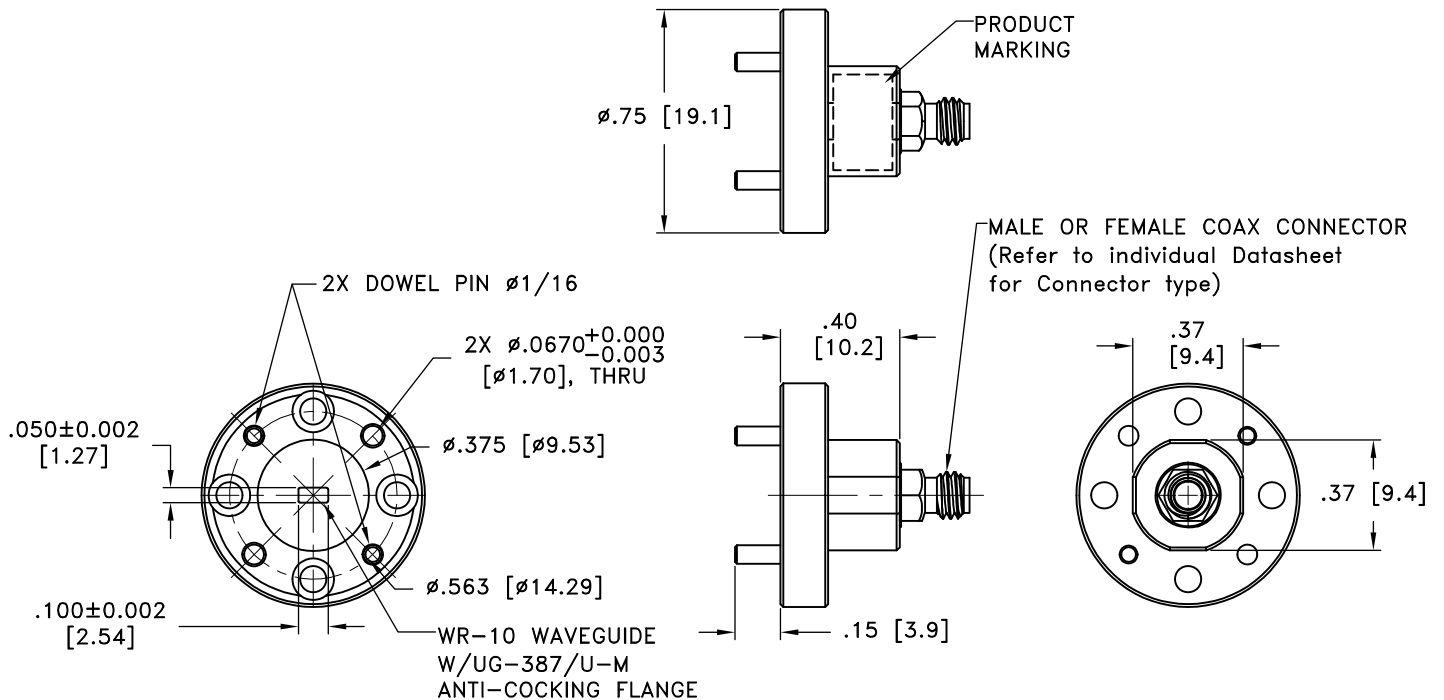


# Adapter

### CONNECTOR SPECIFICATIONS

Description	Connector 1	Connector 2
Connector Type	WR10 UG387/U Flange	1.0 mm Female
Orientation	Straight	Straight

### CASE STYLE DRAWING



Weight: 5.7 grams

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

### PRODUCT MARKING\*: WR10-10+

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



WAVEGUIDE TO COAX

# Adapter

## WR10-10+

Mini-Circuits

50Ω 75 to 110 GHz 1.0 mm Female to WR10 UG387/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	UW3765
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](http://www.minicircuits.com/terms/viewterm.html)

