



## Adapter

WR10-10R+

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

## KEY FEATURES

- Full W-band frequency band, 75-110 GHz
- Low Insertion Loss, 0.7 dB Typ.
- Excellent VSWR, 1.2:1 Typ.
- Compact right-angle design
- 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' WR10-10R+ is a waveguide to coaxial adapter operating from 75 to 110 GHz. This product features a WR10 waveguide interface with a precision standard UG387/U anti-cocking flange to a 1.0 mm-Female coaxial connector. The WR10-10R+ 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 W-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		75		110	GHz
Insertion Loss	75-90		0.7	1.3	dB
	90-100		0.6	1.3	
	100-110		0.7	1.3	
VSWR	75-90		1.2	1.6	:1
	90-100		1.2	1.6	
	100-110		1.2	1.6	

ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

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

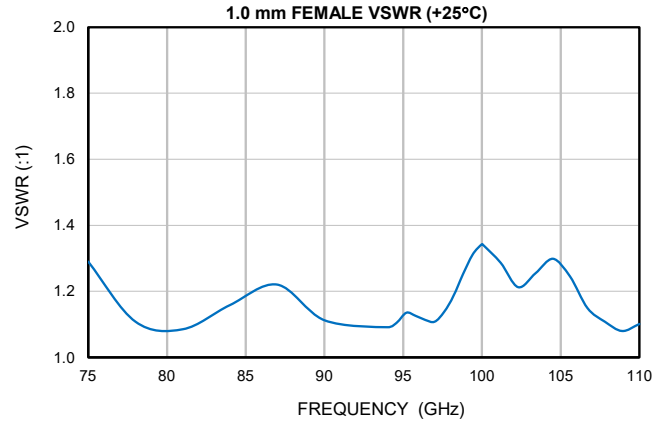
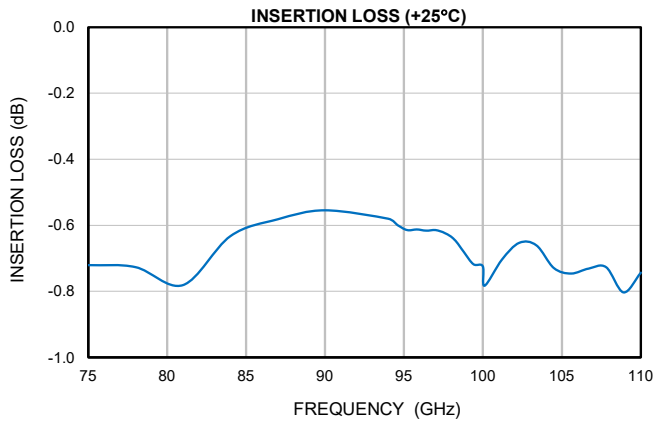
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## TYPICAL PERFORMANCE GRAPHS





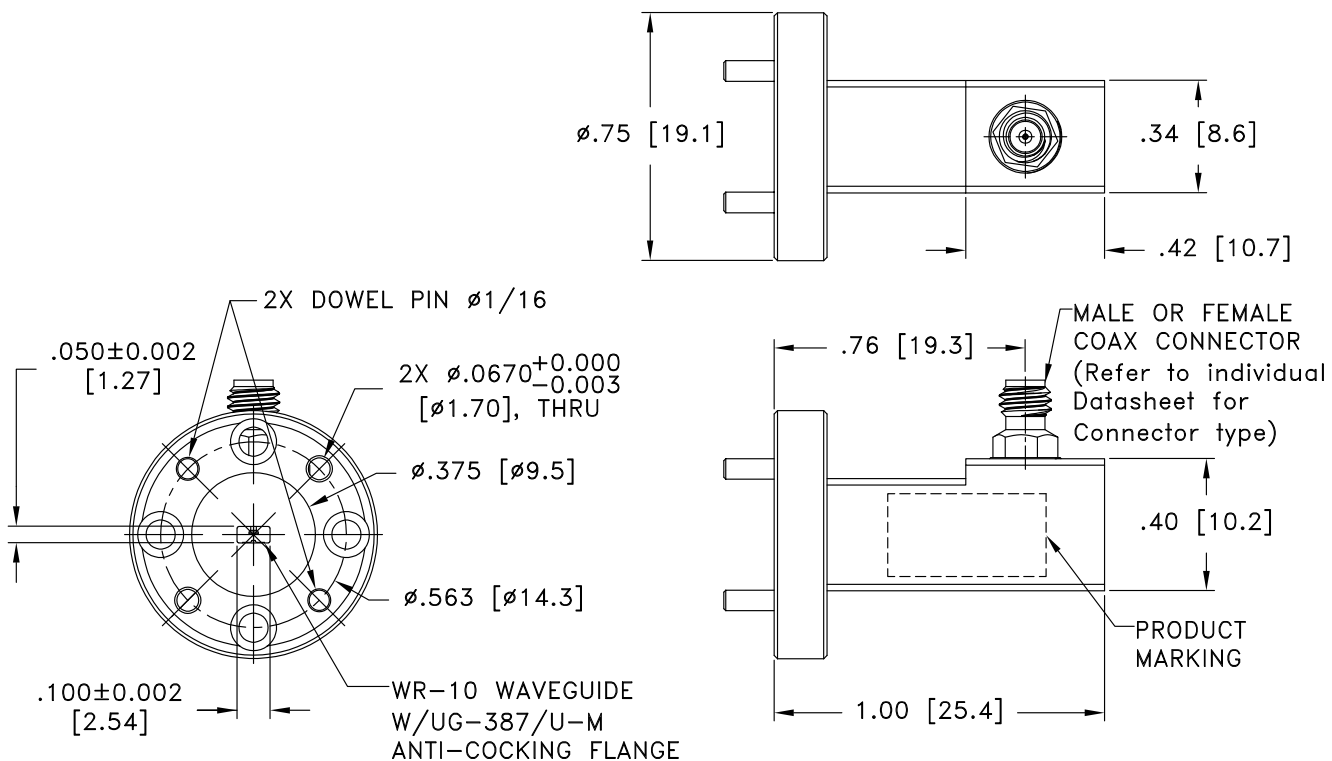
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## CONNECTOR SPECIFICATIONS

Description	Connector 1	Connector 2
Connector Type	WR10 UG387/U Flange	1.0 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\*: WR10-10R+

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



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WAVEGUIDE/COAXIAL

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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
Case Style	UW3674
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 <https://www.minicircuits.com/terms/viewterm.html>



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