

WAVEGUIDE/COAXIAL

Adapter

WR10-10R+

Mini-Circuits

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 RATINGS¹

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

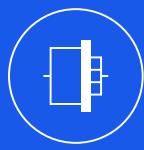
1. Permanent damage may occur if any of these limits are exceeded.

REV. OR
ECO-023972
WR10-10R+
MCL NY
241216

Mini-Circuits

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

PAGE 1 OF 4



WAVEGUIDE/COAXIAL

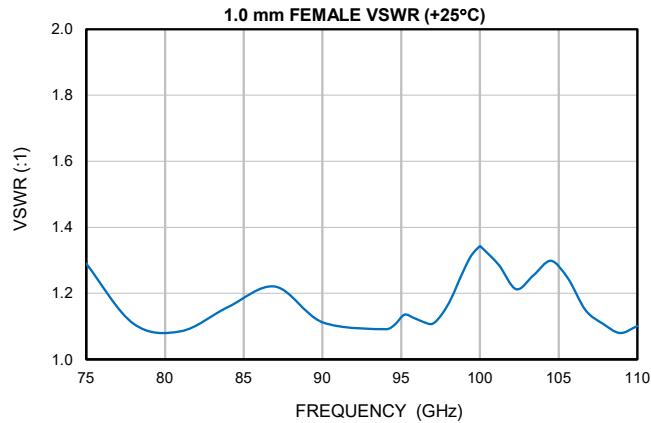
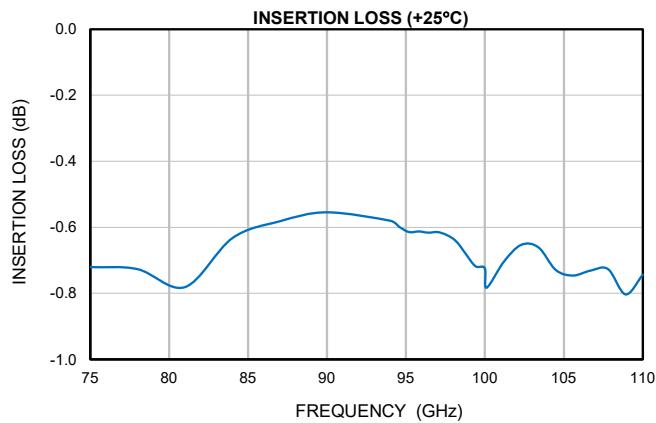
Adapter

WR10-10R+

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

Mini-Circuits

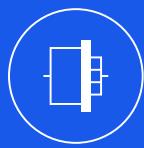
TYPICAL PERFORMANCE GRAPHS



 **Mini-Circuits**

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

PAGE 2 OF 4



WAVEGUIDE/COAXIAL

Adapter

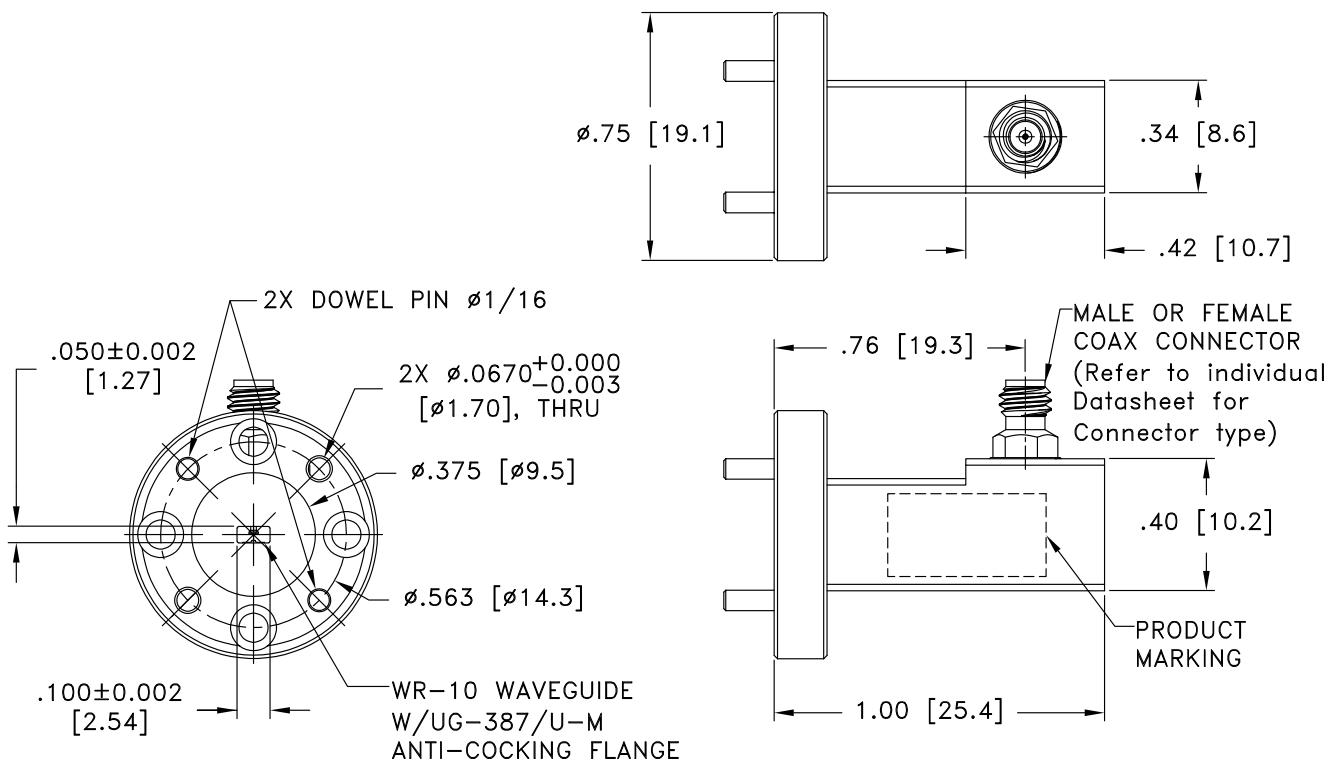
WR10-10R+

Mini-Circuits

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

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

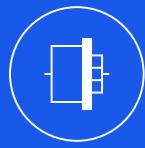
Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03; 3 Pl. ±.015 Inches

PRODUCT MARKING*: WR10-10R+

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

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

PAGE 3 OF 4



WAVEGUIDE/COAXIAL

Adapter

WR10-10R+

50Ω 75 to 110 GHz Right-Angle 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	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>



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[WR10-10R+](#)