



## WAVEGUIDE

# Fixed Attenuator

## WR28-ATT-30+

50 Ω 0.75 W 30 dB 26.5 to 40 GHz WR28 to WR28 Flange

### KEY FEATURES

- 26.5 to 40 GHz
- WR28 Waveguide with Square Flange
- Excellent VSWR, 1.1:1 Typ.
- 750 mW Power Handling

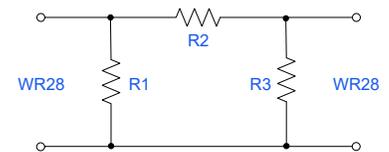


Generic photo used for illustration purposes only

### APPLICATIONS

- Optical Communications
- Test & Measurement
- High-Speed Data Systems
- Instrumentation
- Precision Measurements

### FUNCTIONAL DIAGRAM



### PRODUCT OVERVIEW

The Mini-Circuits catalog model WR28-ATT-30+ is a precision fixed 30 dB 750 mW attenuator. WR28-ATT-30+ operates over an extremely wide frequency range with excellent VSWR and supports a broad range of system and testing applications. Precise performance, excellent VSWR and wide bandwidth make this model an ideal solution for systems requiring accurate attenuation across a very wide frequency range.

### ELECTRICAL SPECIFICATIONS AT +25 °C, Z<sub>0</sub> = 50 Ω

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range	-	26.5	-	40	GHz
Attenuation	26.5-30	1.5	3.3	4.5	dB
	30-33	1.5	3.4	4.5	
	33-36	1.5	3.5	4.5	
	36-38	1.5	3.7	4.5	
	38-40	1.5	3.9	4.5	
VSWR	26.5-30	-	1.1	1.7	:1
	30-33	-	1.1	1.7	
	33-36	-	1.1	1.7	
	36-38	-	1.1	1.7	
	38-40	-	1.1	1.7	

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

Parameter	Ratings
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.



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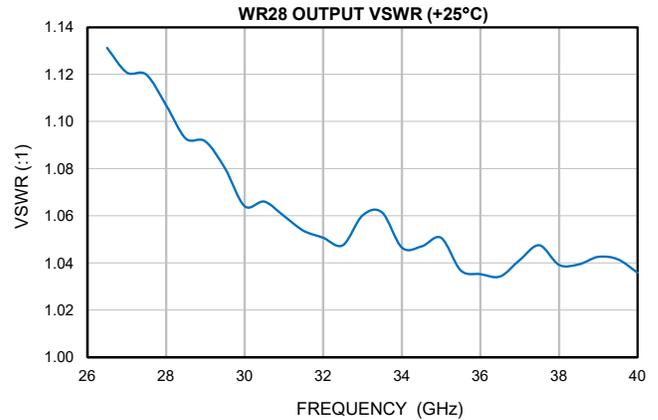
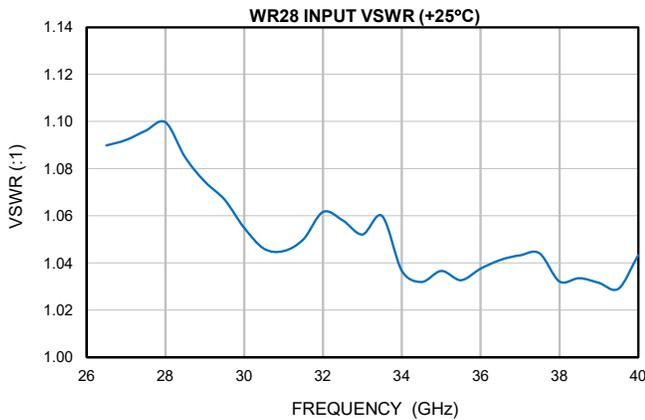
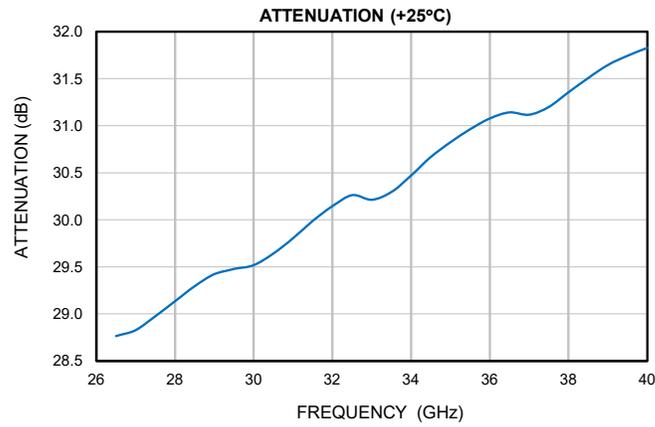
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Mini-Circuits

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### TYPICAL PERFORMANCE GRAPHS





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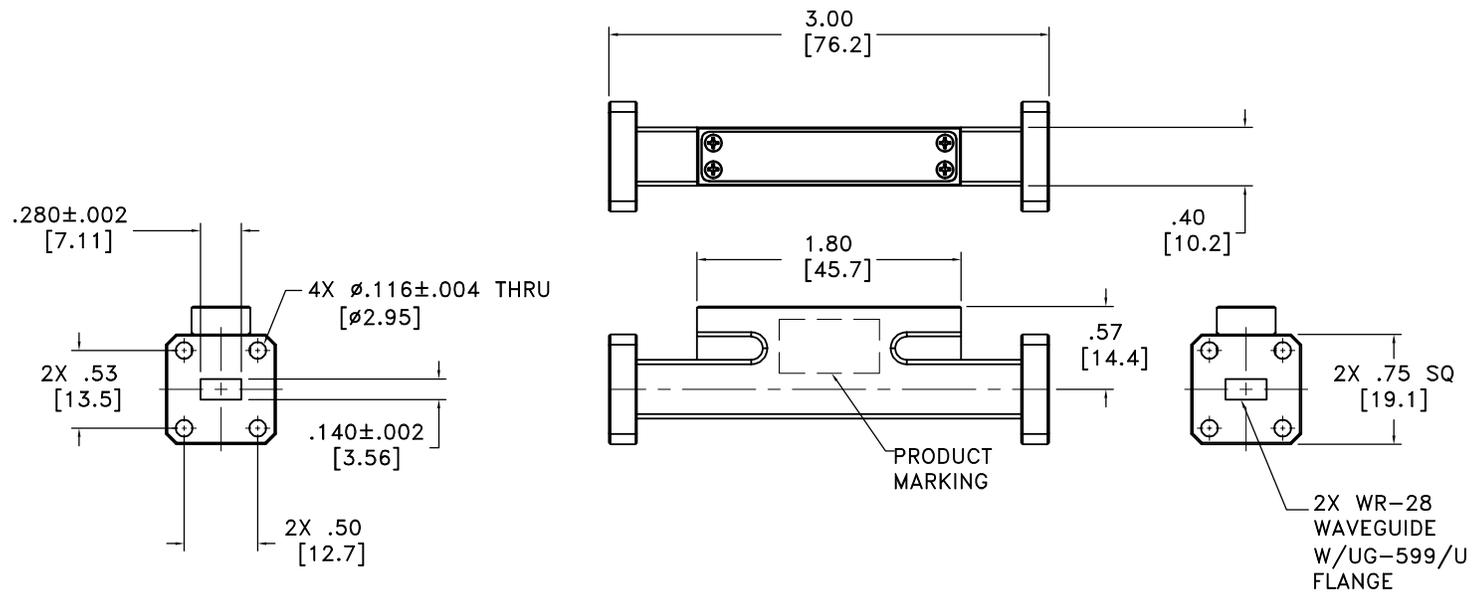
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### COAXIAL CONNECTIONS

Description	RF1 PORT	RF2 PORT
Connector Type	WR28 Flange	WR28 Flange
Orientation	Straight	Straight

### CASE STYLE DRAWING



Weight: 96.388 grams

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

### PRODUCT MARKING\*: WR28-ATT-30+

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





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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

<b>Performance Data &amp; Graphs</b>	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
<b>Case Style</b>	UW3808-2
<b>RoHS Status</b>	Compliant
<b>Environmental Ratings</b>	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-Circuit's 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)

