

30 dB WR-90 Directional Waveguide Broadwall Coupler With UG-39/U Square Cover Flange and E-Plane Coupled Port from 8.2 GHz to 12.4 GHz

The FMWCP1019 is a WR-90 Directional Broadwall waveguide coupler that operates in the frequency range of 8.2 to 12.4 GHz. This Waveguide component has a typical VSWR of 1.05: 1. These designs are made of painted copper alloy and incorporate a broad wall configuration that result in a mid-band nominal coupling value of 10, 20, or 30 dB. Common applications for this component would be where power measurements are required within a system for measuring/sampling power or frequency monitoring with minimal signal loss to the main transmission line. Fairview Microwave offers a complete family of waveguide Crossguide and Broadwall couplers that are in-stock and ship same day.



Features:

- Broadwall Waveguide Coupler
- 30 dB Nominal Coupling Level
- 8.2 GHz to 12.4 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR

Applications:

- Test Benches
- Radar
- Satellite
- Microwave Radio
- Attenuation Measurements
- Power Measurements
- Source Leveling

Electrical Specifications*

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
Directivity		40		dB
Insertion Loss		0.15		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		30		dB

* Values at 25°C, sea level

Mechanical Specifications

Size

Length 16.68 in [423.67 mm]
Height 2.742 in [69.65 mm]
Weight 1.83 lbs [830.07 g]

Configuration

Design Directional E-Plane Broadwall
Size WR-90

Input Flange

Flange Type Square Cover
Flange Designation UG-39/U
Material Copper Alloy
Plating Silver

Output Flange

Flange Type Square Cover
Flange Designation UG-39/U
Material Copper Alloy
Plating Silver

Coupled Flange(s)

Flange Type Square Cover
Flange Designation UG-39/U
Material Copper Alloy
Plating Silver

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes
REACH Compliant 12/17/2015

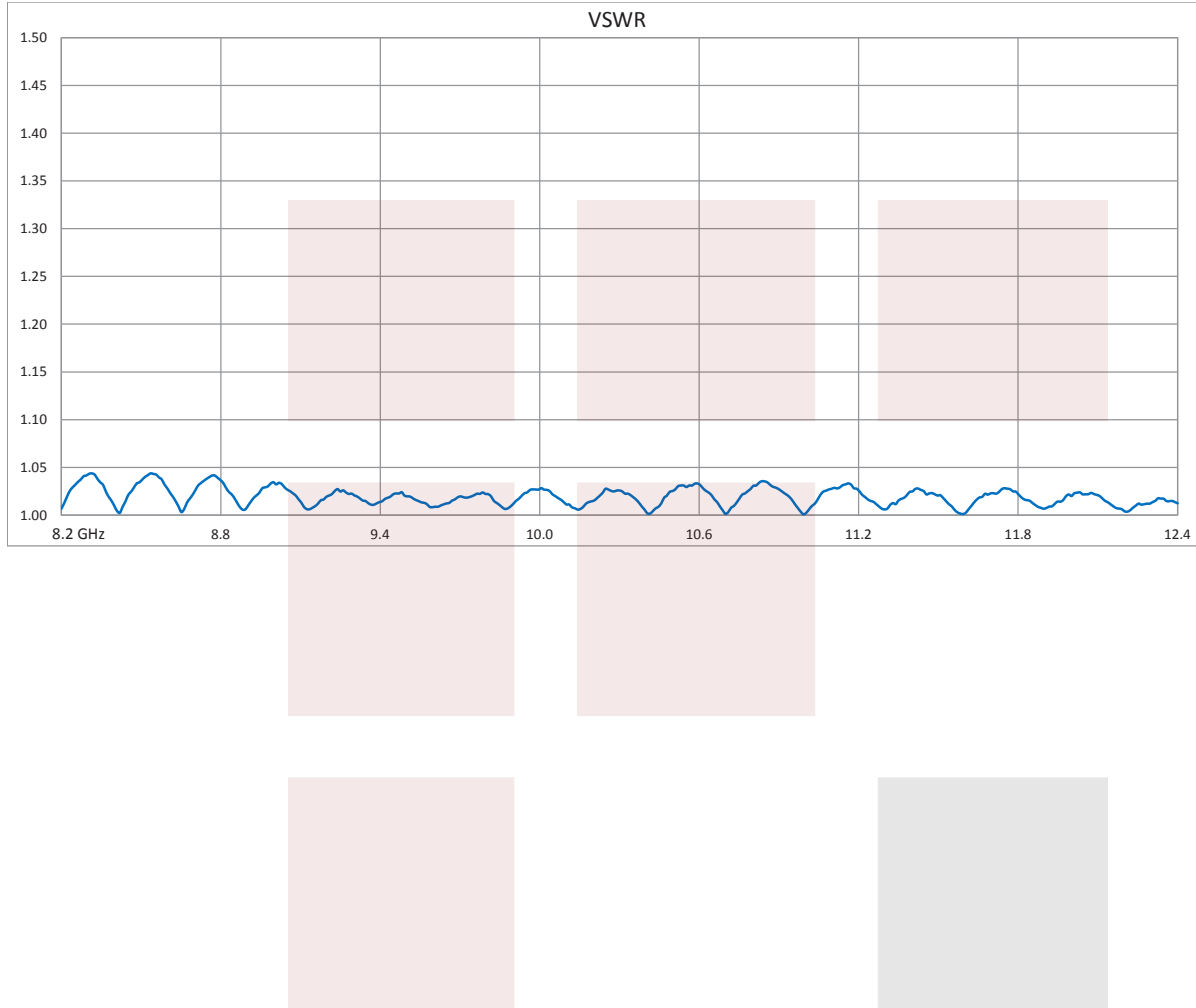
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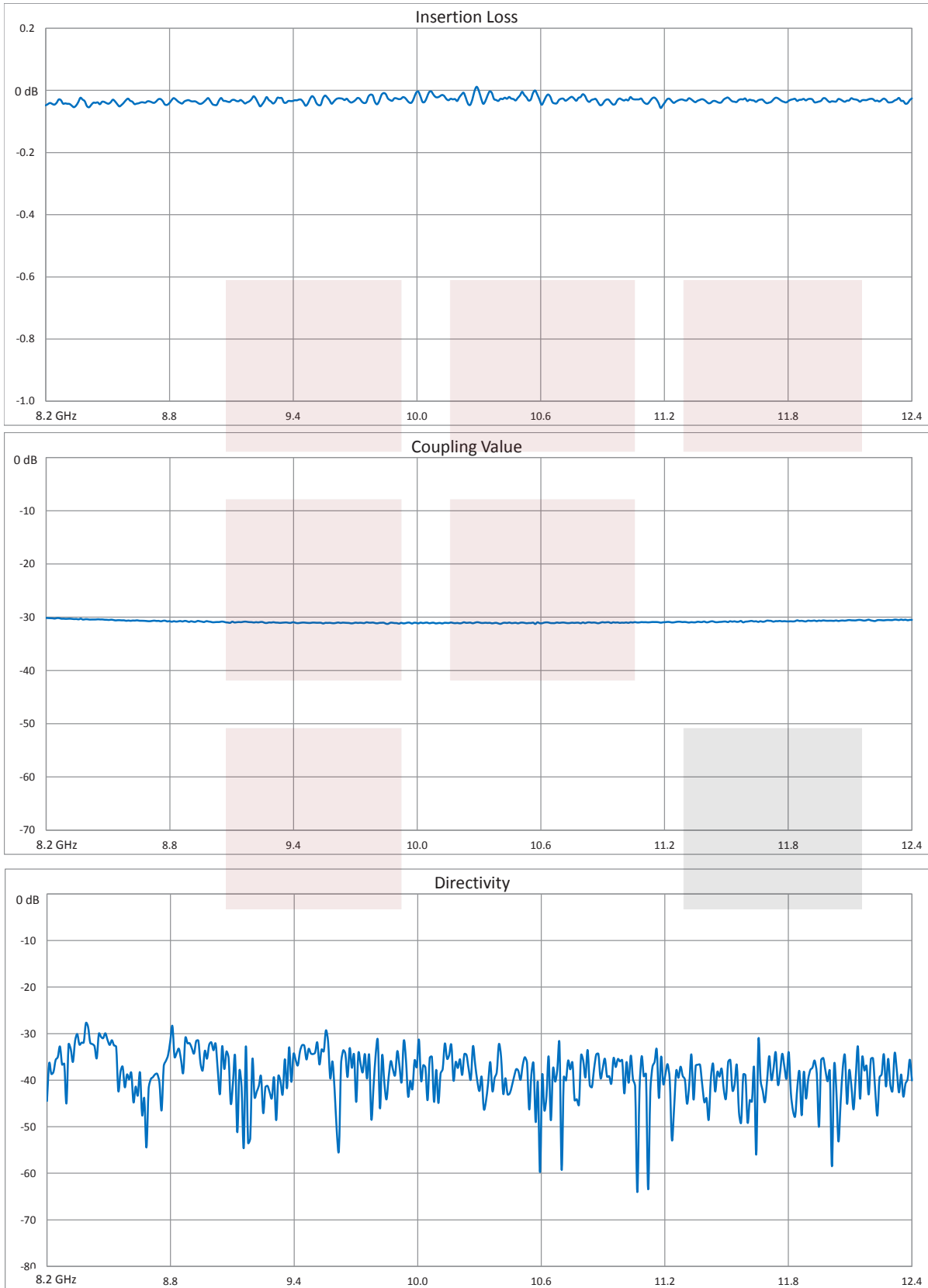
Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Typical Performance Data





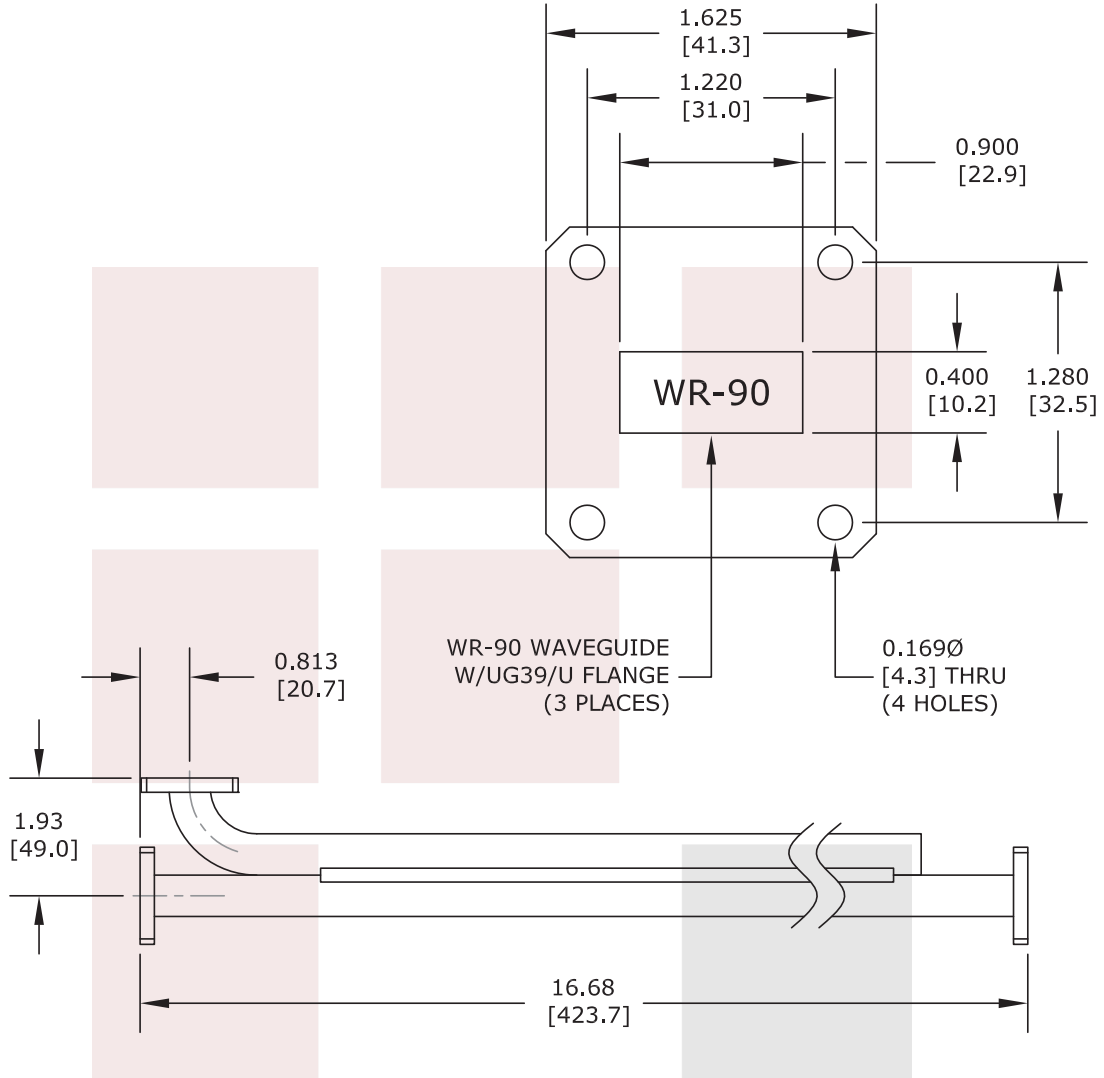
30 dB WR-90 Directional Waveguide Broadwall Coupler With UG-39/U Square Cover Flange and E-Plane Coupled Port from 8.2 GHz to 12.4 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [30 dB WR-90 Directional Waveguide Broadwall Coupler With UG-39/U Square Cover Flange and E-Plane Coupled Port from 8.2 GHz to 12.4 GHz FMWCP1019](#)

URL: <http://www.fairviewmicrowave.com/30-db-wr-90-directional-waveguide-broadwall-coupler-ug39-square-e-fmw-cp1019-p.aspx>

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UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES.

DECIMALS	ANGLES
.X ±.030	±1/2 DEG.
.XX ±.015	FRACTIONS
.XXX ±.005	±1/32

* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

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ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		DWG NO FMWCP1019		CAGE CODE 3FKR5	
TITLE 30 dB WR-90 Directional Waveguide Broadwall Coupler With UG-39/U Square Cover Flange and E-Plane Coupled Port from 8.2 GHz to 12.4 GHz		CAD FILE 041516	SHEET	SCALE N/A	SIZE A
				2233	