

**WR-90 Seamless Flexible Waveguide Using UG-39/U Square Cover Flange With a 8.2 GHz to 12.4 GHz Frequency Range**

The SMW90SF005-12 is part of Fairview Microwave's family of flexible, seamless waveguides which operates in the 8.2 to 12.4 GHz range. The waveguide body is made of silver plated brass. It can be bent in both the E and H planes without impairing VSWR or attenuation. The waveguide is covered by a neoprene jacket which protects the waveguide and provides mechanical support.

**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
VSWR		1.07:1		
Insertion Loss		0.09		dB

**Mechanical Specifications**

Waveguide Size	WR-90
Waveguide Design	Seamless
Section Length	12 in [304.8 mm]
E-Plane Minimum Bend Radius, One Time	0.87 in [22.1 mm]
H-Plane Minimum Bend Radius, One Time	1.69 in [42.93 mm]
Maximum Offset Rotation, One Time	45 degrees/ft

Description	Flange 1	Waveguide	Flange 2
Type	Square Cover	WR-90	Square Cover
Designation	UG-39/U		UG-39/U
Material	Brass	Copper	Brass
Plating		Silver	
Color	Gold	Black	Gold

**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant	Yes
REACH Compliant	12/17/2015

**Plotted and Other Data**

- Notes:
- Notes, Plotted Data



**Features:**

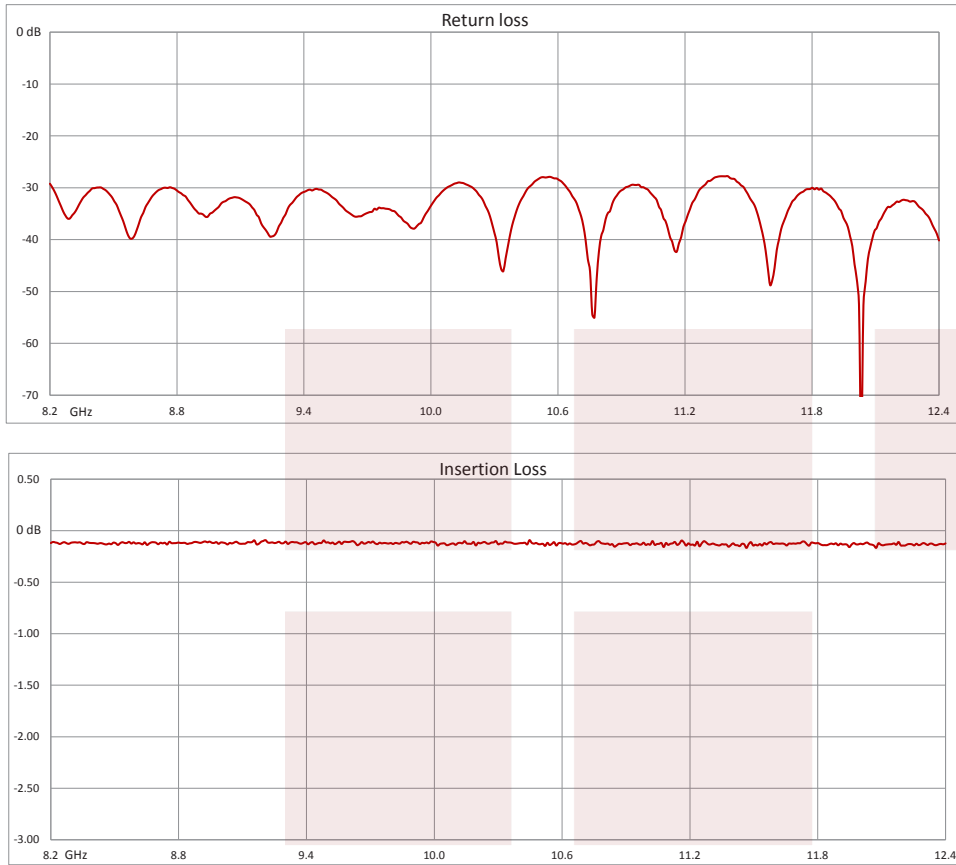
- WR-90 waveguide
- Flexes in both the E and H plane
- 8.2 GHz to 12.4 GHz Frequency Range
- Brass flanges with a silver plated brass body
- Neoprene sleeve provides added protection and mechanical support

**Applications:**

- Allows expansion/contraction due to thermal issues.
- Test Benches
- Microwave Radio
- Eliminates installation problems caused by misalignment.
- Pressurized waveguide systems
- Provides vibration isolation

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**Typical Performance Data**

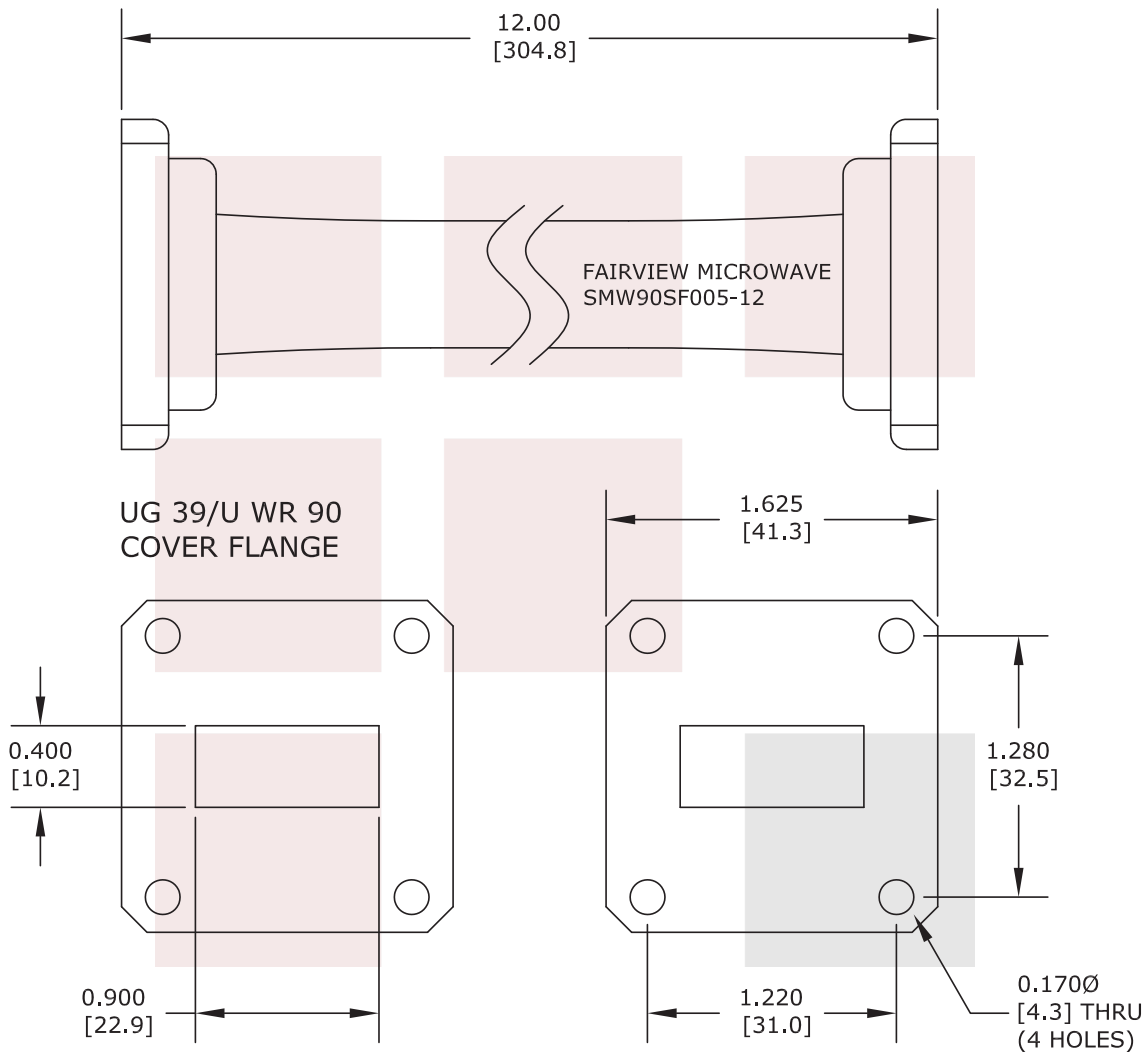


WR-90 Seamless Flexible Waveguide Using UG-39/U Square Cover Flange With a 8.2 GHz to 12.4 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-90 Seamless Flexible Waveguide Using UG-39/U Square Cover Flange With a 8.2 GHz to 12.4 GHz Frequency Range SMW90SF005-12](https://www.fairviewmicrowave.com/wr-90-seamless-flexible-waveguide-ug39-square-8.2-12.4-ghz-smw90sf005-12-p.aspx)

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TITLE WR-90 Seamless Flexible Waveguide Using UG-39/U Square Cover Flange With a 8.2 GHz to 12.4 GHz Frequency Range		DWG NO SMW90SF005-12		CAGE CODE 3FKR5	
CAD FILE	101315	SHEET	SCALE	N/A	SIZE A 2233