



W-Band Faraday Isolator

Description:

Model STF-10-S1 is a full band Faraday isolator that operates from 75 to 110 GHz. The Faraday isolator is constructed with a longitudinal, magnetized ferrite rod that causes a Faraday rotation of the incoming RF signal. The Faraday isolator offers 28 dB typical isolation and 1.5 dB nominal insertion loss with good flatness. The input and output ports are WR-10 waveguides with UG-387/U-M flanges.



Features:

- Full Waveguide Band Operation
- Moderate Insertion Loss
- High Isolation
- Instrumentation Grade

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
RF Frequency Range	75 GHz		110 GHz
Insertion Loss		1.5 dB	2.2 dB
Isolation		28 dB	
VSWR		1.4:1	
Power Handling		1.0 W	1.2 W

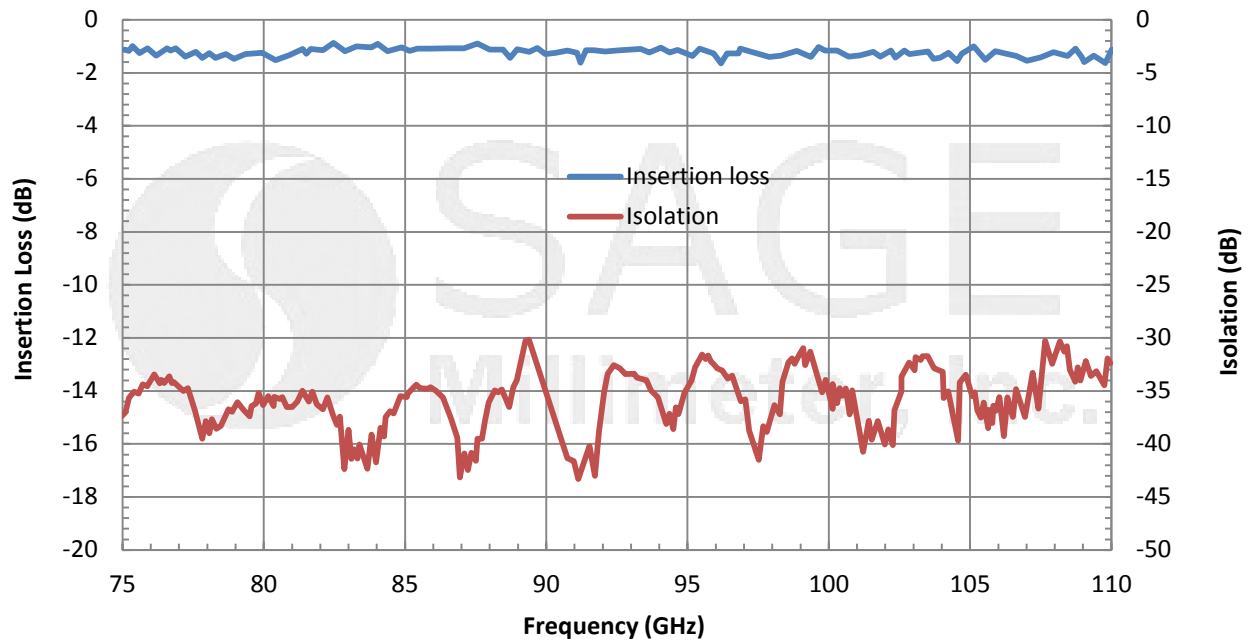
Mechanical Specifications:

Item	Specification
RF Input and Output	WR-10 Waveguide with UG-387/U-M Flange
Waveguide Flange Material	Brass
Finish	Gold Plated and Black Anodized
Weight	2.2 Oz
Insertion Length	2.5"
Outline	TF-SW

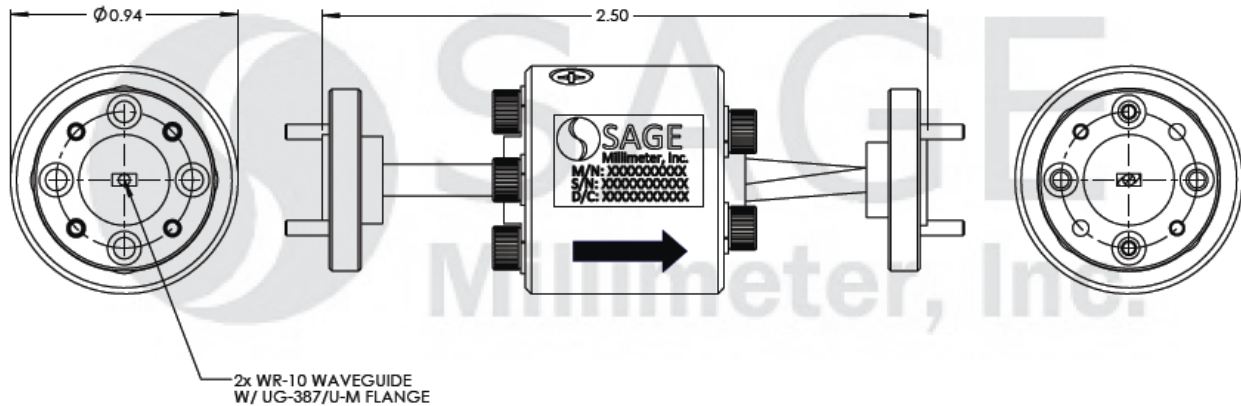


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Typical Performance vs. Frequency



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



Note:

- All data are presented using a limited sample lot. Actual data may vary unit to unit.
- All testing was performed under +25 °C case temperature.
- Other mechanical configuration is available under different model number.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings of the device will damage the device.
- The device is sensitive to magnetic fields. Always keep magnet fields 6 inches away.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.

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