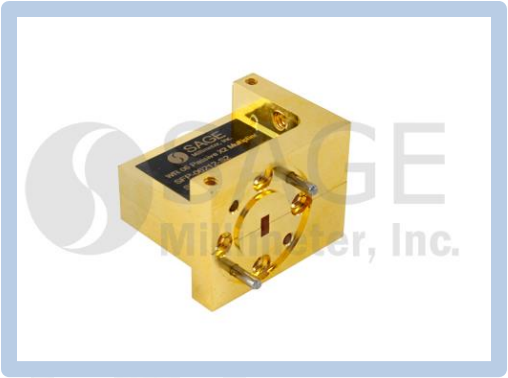
SFP-08215-S2

Advanced

F-Band X2, Passive Frequency Multiplier, 90 to 140 GHz

Description:



Model SFP-08215-S2 is a F-Band, X2 passive multiplier that utilizes GaAs Schottky, beam-lead diodes and a balanced circuit configuration to generate 2nd order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 45 to 70 GHz at +16 dBm RF power to yield typical 90 to 140 GHz at +2 dBm typical output power. The multiplier is equipped with a WR-15 waveguide with UG-385/U flange as its input port and a WR-08 waveguide with UG-387/U-M flange as its output port.

Features:

- Minimal Conversion Loss
- No External Bias
- Compact Package

Applications:

- Source Modules
- Frequency Extenders
- Radar and Communication Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	45 GHz		70 GHz
Output Frequency	90 GHz		140 GHz
Input Power		+16 dBm	
Damage Input Power			+18 dBm
Output Power		+2 dBm	
Harmonic Suppression		20 dB	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
RF Input	WR-15 Waveguide with UG-385/U Flange
RF Output	WR-08 Waveguide with UG-387/U-M Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	0.75” (W) x 0.75”(H) x 1.2” (L)
Outline	FP-FV2-A

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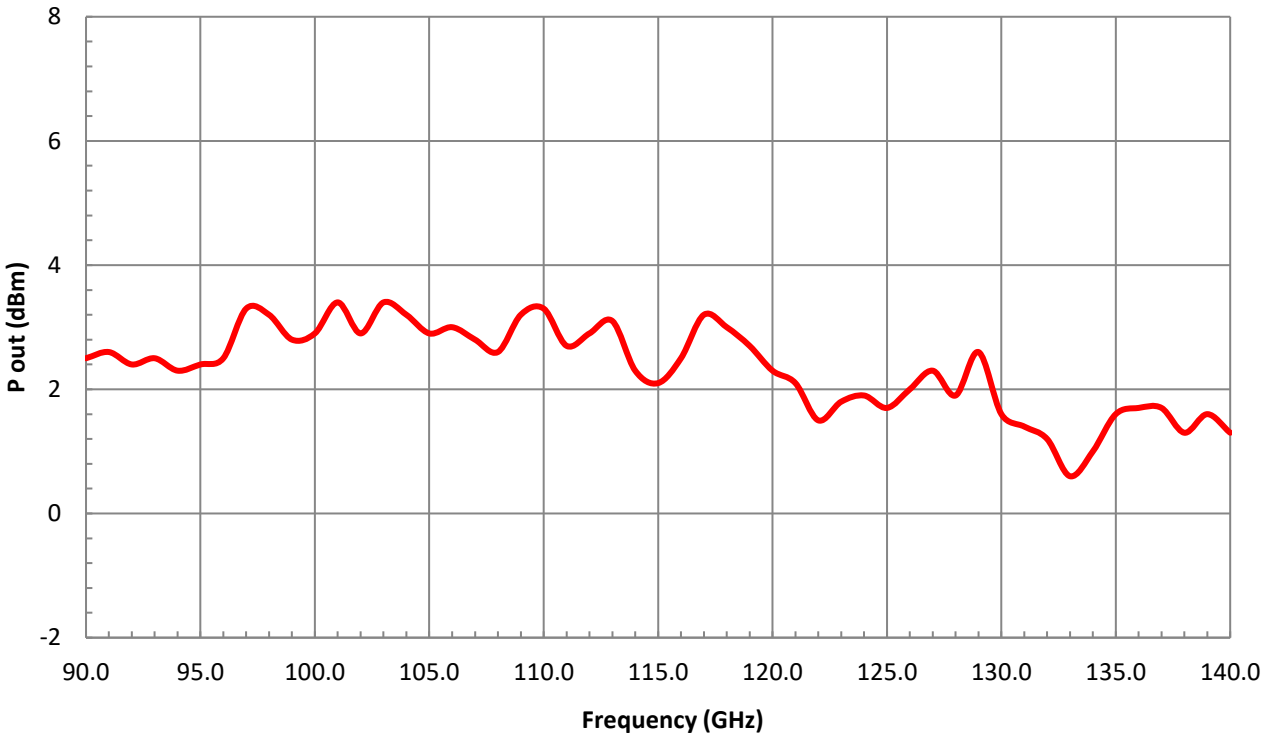
Typical Performance vs Frequency

Input Power = +16 dBm



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

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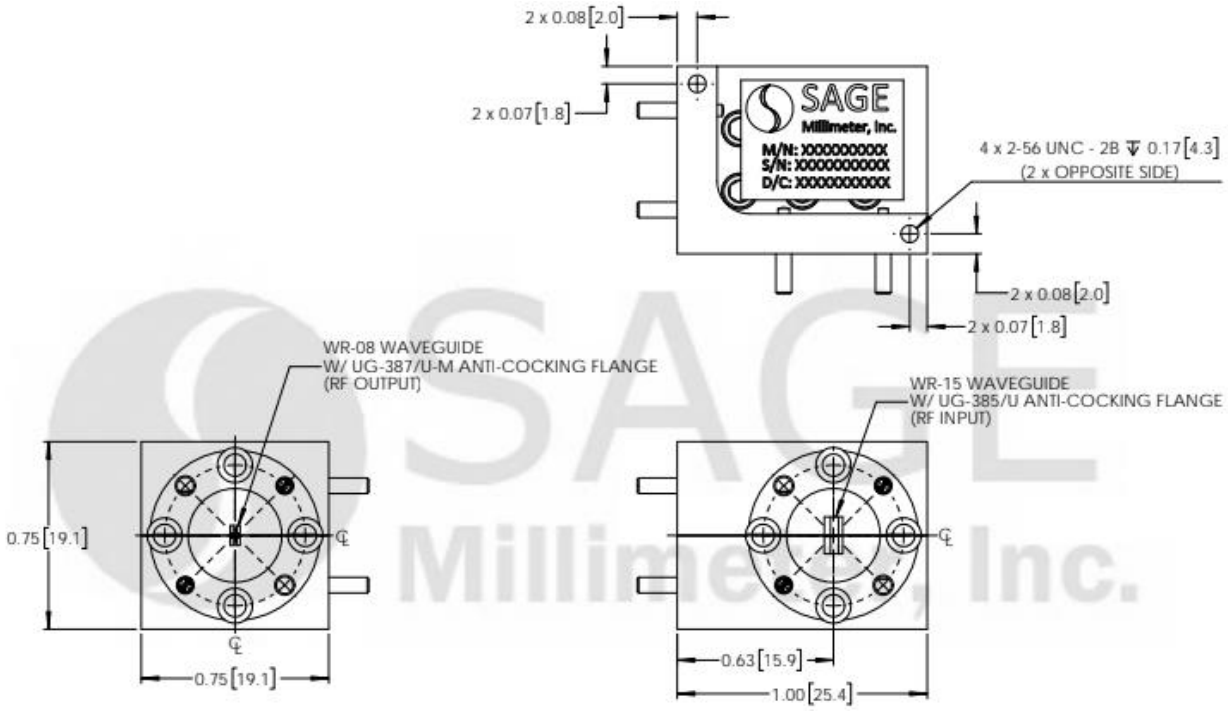

Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25˚C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings of the multiplier will damage the device.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.
- The multiplier is a static sensitive device. Always follow ESD rules when working with the multiplier.