SFP-06319-U6

Rev 1.0

D-Band X3, Passive Frequency Multiplier, 110 to 170 GHz

Description:

Model SFP-06319-U6 is a D-Band, X3 passive multiplier that utilizes GaAs Schottky, beam-lead diodes and a balanced circuit configuration to generate 3rd order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 36.67 to 56.67 GHz at +20 dBm RF power to yield typical 110 to 170 GHz at -3 dBm output power. The multiplier is equipped with a WR-19 waveguide and UG-383/U-M flange as its input port and a WR-06 waveguide and 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	36.67 GHz		56.67 GHz
Output Frequency	110.0 GHz		170.0 GHz
Input Power	+17 dBm	+20 dBm	+22 dBm
Output Power		-3 dBm	
Harmonic Suppression		20 dB	
Specification Temperature		+25 °C	
Operating Temperature	-20 °C		+70 °C

Mechanical Specifications:

Item	Specification
RF Input	WR-19 Waveguide with UG-383/U-M Flange
RF Output	WR-06 Waveguide with UG-387/U-M Flange
Material	Brass
Finish	Gold Plated
Weight	0.4 Oz
Outline	FP-DU3-FI1

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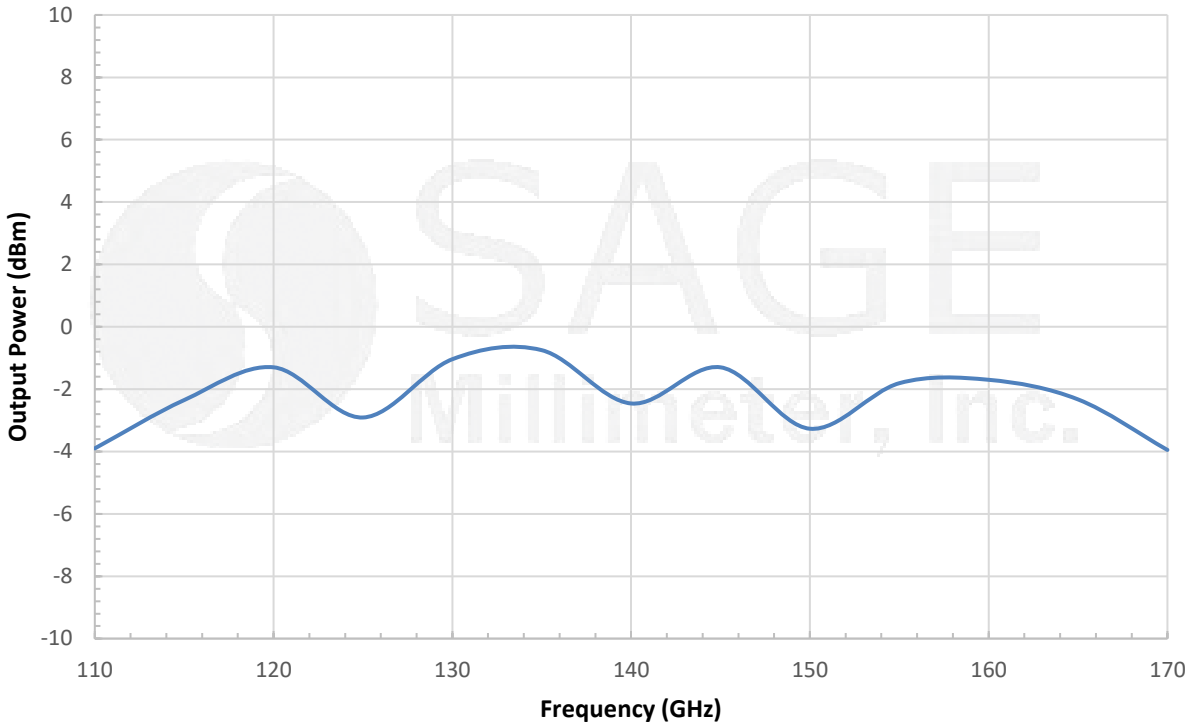
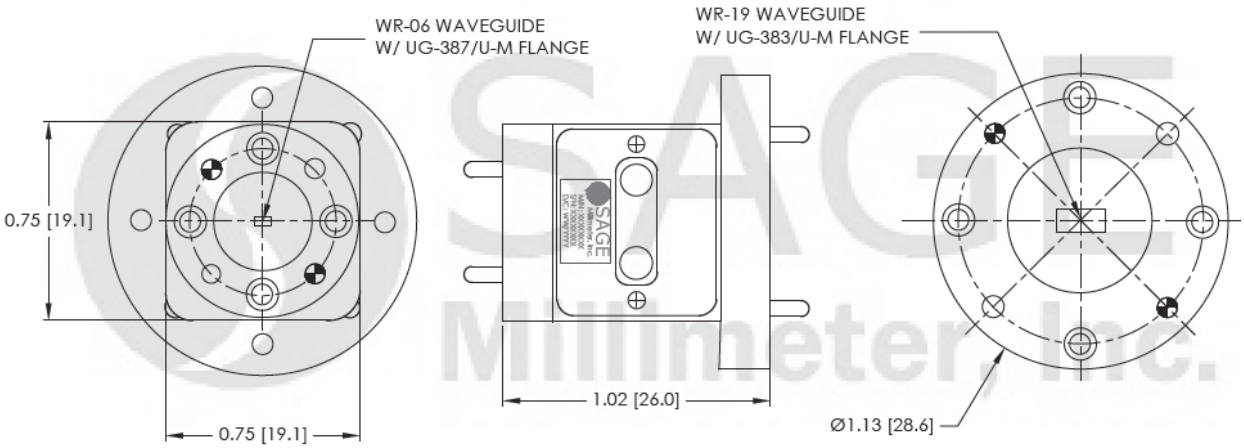
Typical Output Power vs. Frequency

Input Power: +18 dBm



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



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.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

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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.

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