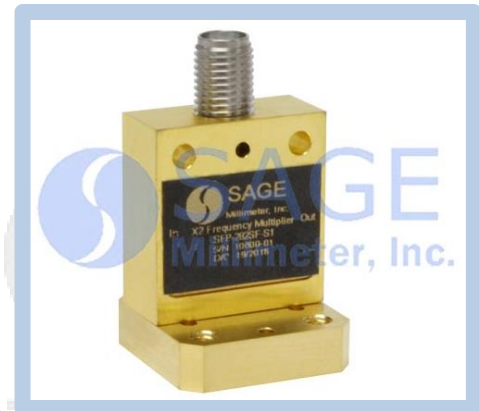


Ka-Band X2, Passive Frequency Multiplier

Description:

Model SFP-223403205-28SF-S1 is a Ka-Band, X2 passive multiplier that utilizes pHEMT technology to generate even order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency of 11 to 20 GHz at +18 dBm RF power to yield 22 to 40 GHz at +5 dBm. The multiplier is equipped with a female SMA connector as its input port and a WR-28 waveguide with a UG-599/U flange as its output port. Other interface configurations are offered under different model numbers.



Features:

- Full Waveguide Band Operation
- No External Bias Required
- Balanced Configuration for Low Harmonic Content

Applications:

- Source Modules
- Frequency Extenders
- Communication Systems
- Radar Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	11.0 GHz		20.0 GHz
Output Frequency	22.0 GHz		40.0 GHz
Input Power	+16 dBm	+18 dBm	+20 dBm
Output Power		+5 dBm	
Harmonic Suppression		20 dBc	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

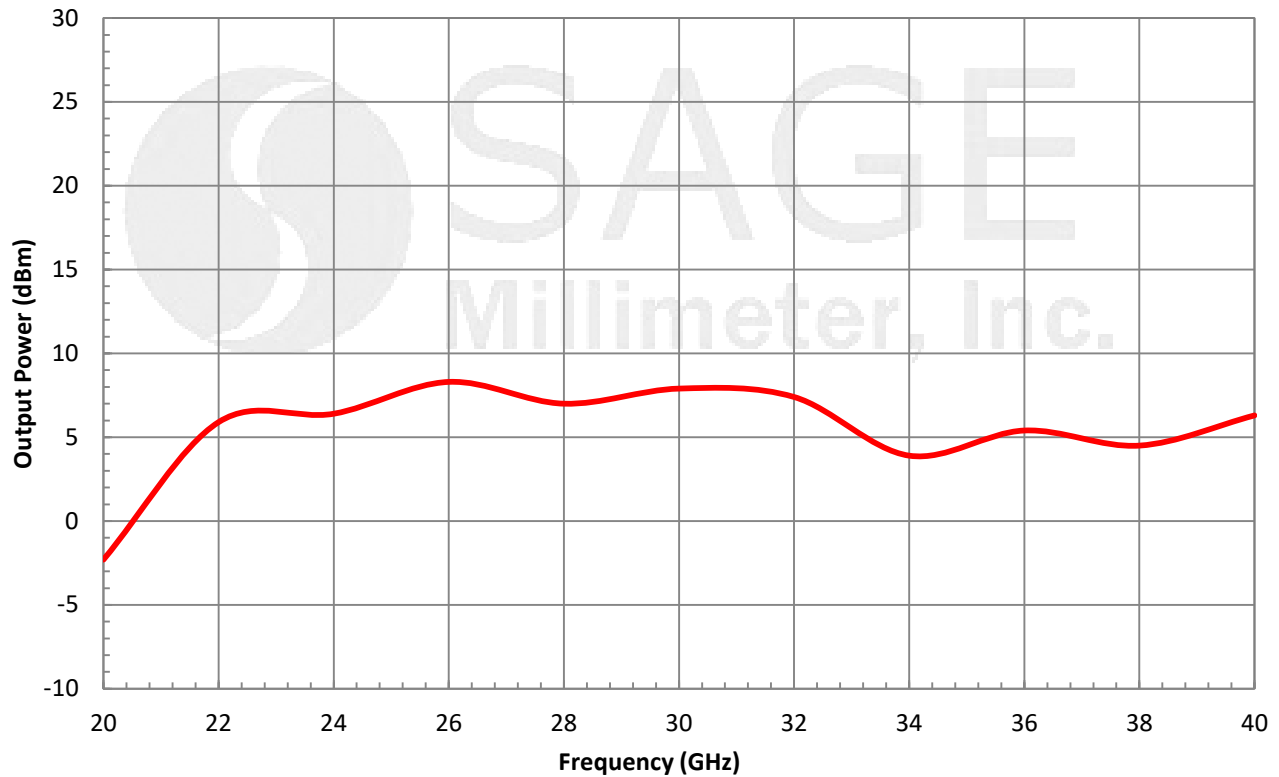
Mechanical Specifications:

Item	Specification
Input Port	SMA (F)
Output Port	WR-28 Waveguide with UG-599/U Flange
Case Material	Aluminum
Finish	Gold Plated
Weight	0.5 Oz
Size	0.75" (W) X 1.14" (L) X 0.75" (H)
Outline	FP-AS2

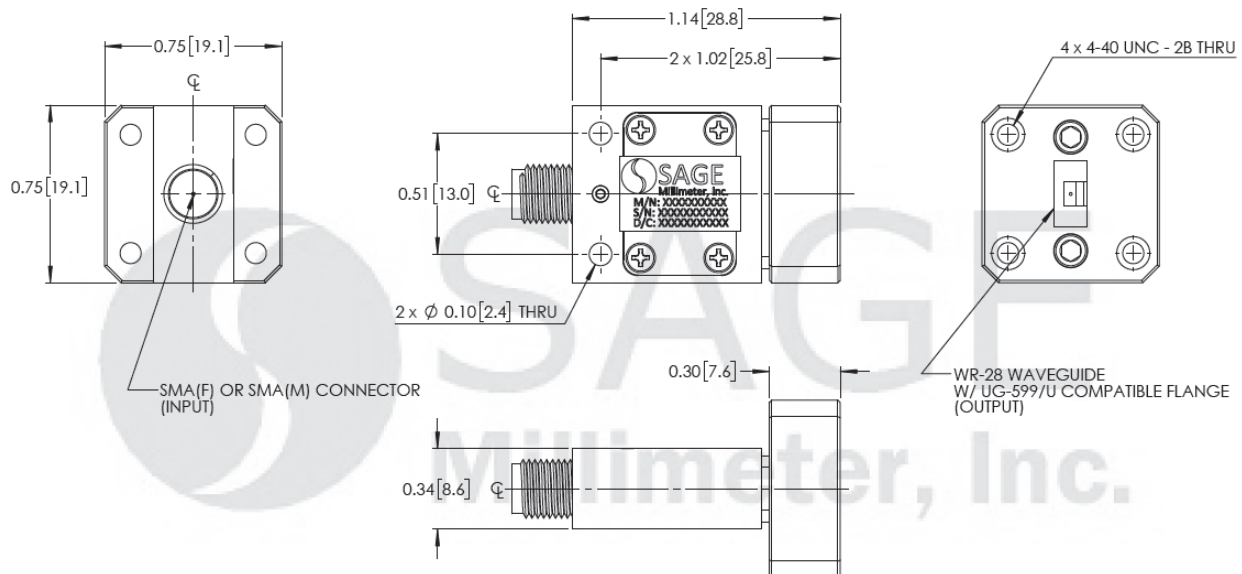
Ka-Band X2, Passive Frequency Multiplier

Typical Output Power vs. Output Frequency

Input Power: +18 dBm



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





Ka-Band X2, Passive Frequency Multiplier

Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- 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 degrade performance and/or damage the device.
- The multiplier is a static sensitive device. Always follow ESD rules when working with the multiplier.

