SFP-222KF-S1

Rev. 1.0

Q-Band X2, Passive Frequency Multiplier

Description:

Model SFP-222KF-S1 is a Q-Band, X2 passive multiplier that utilizes GaAs Schottky, beam-lead diodes and a balanced circuit configuration to generate second order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 16.5 to 25 GHz at +20 dBm RF power to yield 33 to 50 GHz at +7 dBm. The multiplier is equipped with a female 2.92 mm coaxial connector as its input port and a WR-22 waveguide with a UG-383/U-M Flange as its output port. Other interface configurations are offered under different model numbers.

Features:

- Minimal Conversion Loss
- No External Bias
- Compact Package

Applications:

- Source Modules
- Communication Systems
- Radar Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	16.5 GHz		25.0 GHz
Output Frequency	33.0 GHz		50.0 GHz
Input Power		+20 dBm	+22 dBm
Output Power		+7 dBm	
Harmonic Suppression		20 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

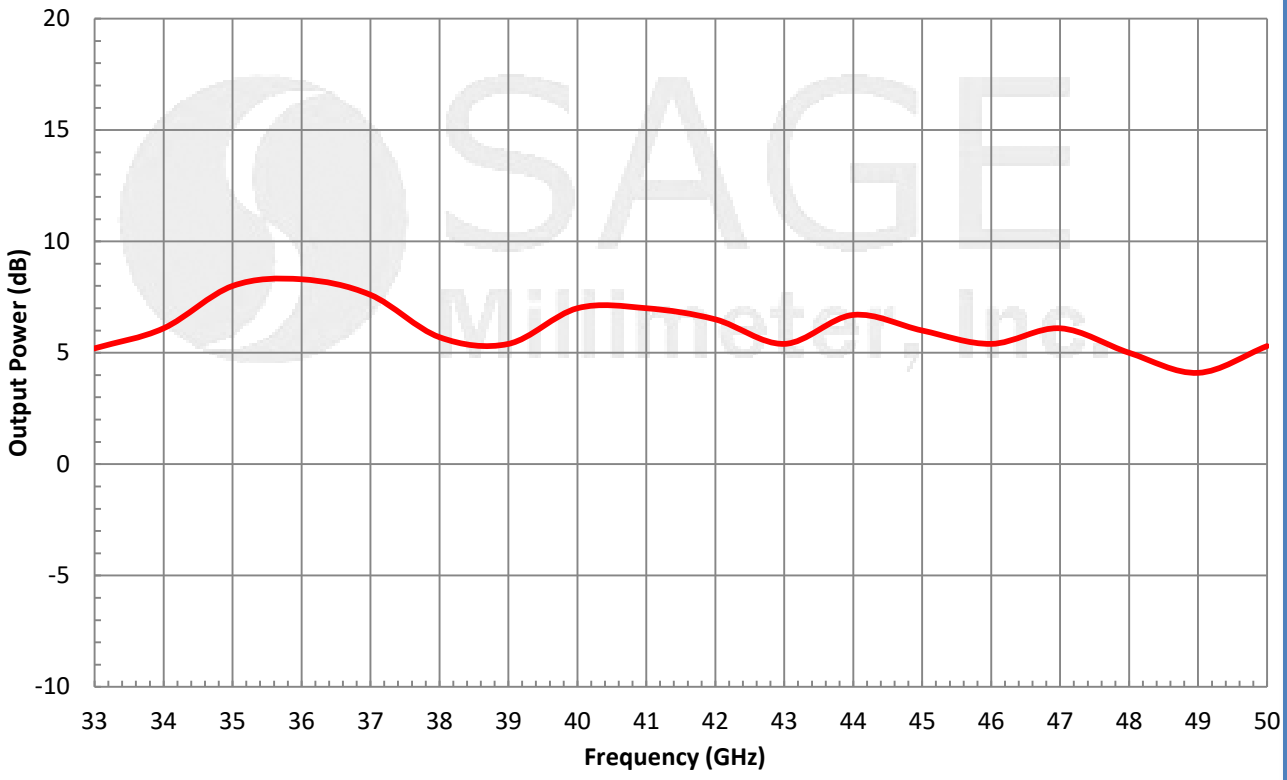
Item	Specification
Input Port	K(F)
Output Port	WR-22 Waveguide with UG-383/U-M Flange
Case Material	Aluminum
Finish	Gold Plated
Weight	0.5 Oz
Outline	FP-QK2

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

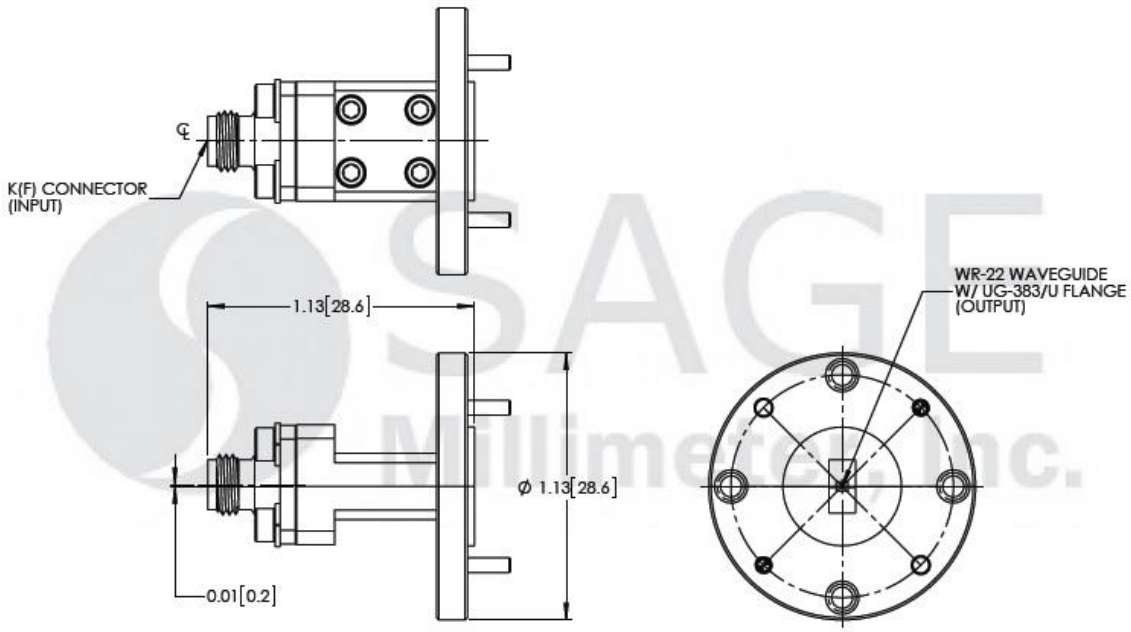
Q-Band X2, Passive Frequency Multiplier

Output Power vs. Output Frequency

Input Power +20 dBm



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



www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

Q-Band X2, Passive Frequency Multiplier

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 degrade performance and/or damage the device.
- The multiplier is a static sensitive device. Always follow ESD rules when working with the multiplier.

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com