



Ka-Band X3, Passive Frequency Multiplier, +10 dBm Input Power

Description:

Model SFP-2734033N05-28SF-S1 is a Ka-Band, X3 passive multiplier that utilizes GaAs Schottky, beam-lead diodes and a balanced circuit configuration to generate third order harmonics while suppressing unwanted harmonic products. This multiplier has an input frequency of 8.37 to 13.33 GHz at +10 dBm RF power to yield 26.5 to 40.0 GHz at -5 dBm power at the output. The multiplier is equipped with an SMA-female coaxial connector as its input port and a WR-28 waveguide as its output port. Other interface configurations are offered in different model numbers.



Features:

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

Applications:

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

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	8.37 GHz		13.33 GHz
Output Frequency	26.5 GHz		40.0 GHz
Input Power		+10 dBm	+16 dBm
Output Power		-5 dBm	
Harmonic Suppression		-20 dB	
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	1.33" (L) x 0.75" (W) x 0.51" (H)
Outline	FP-AS3

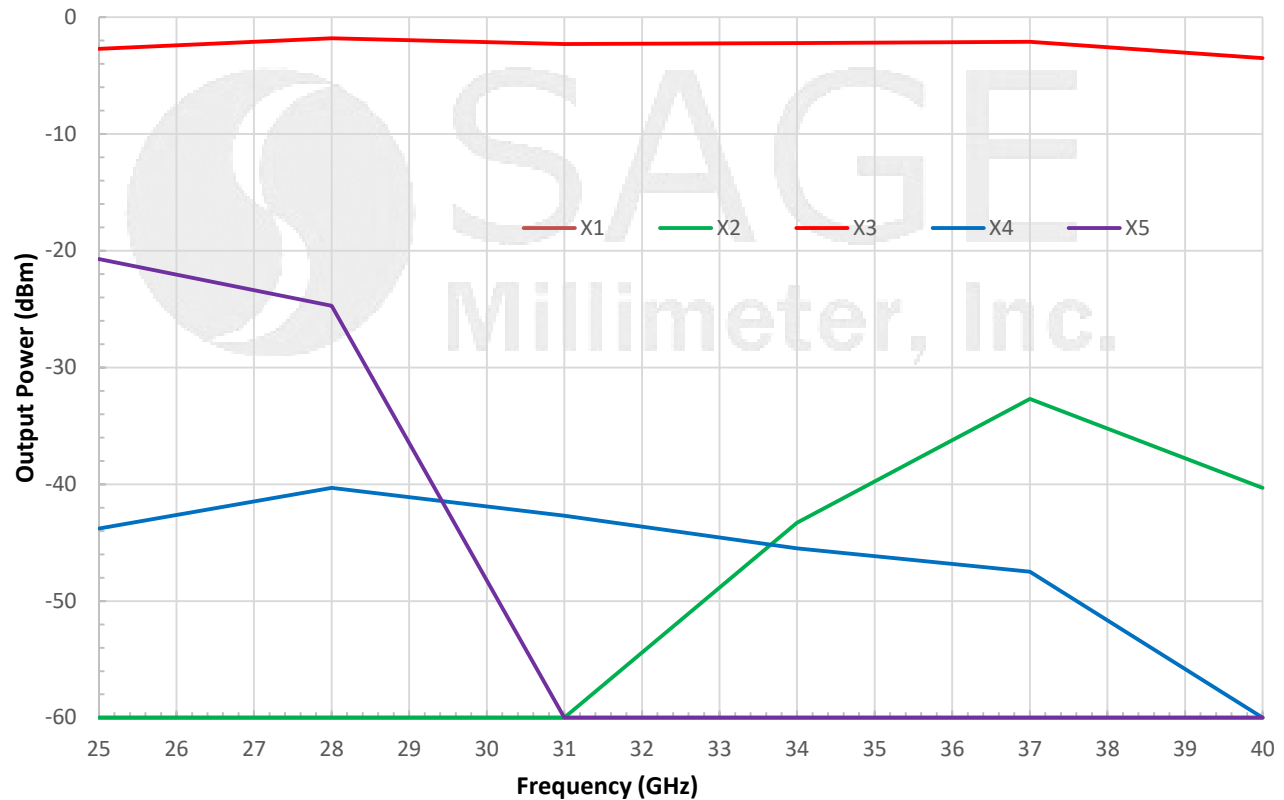




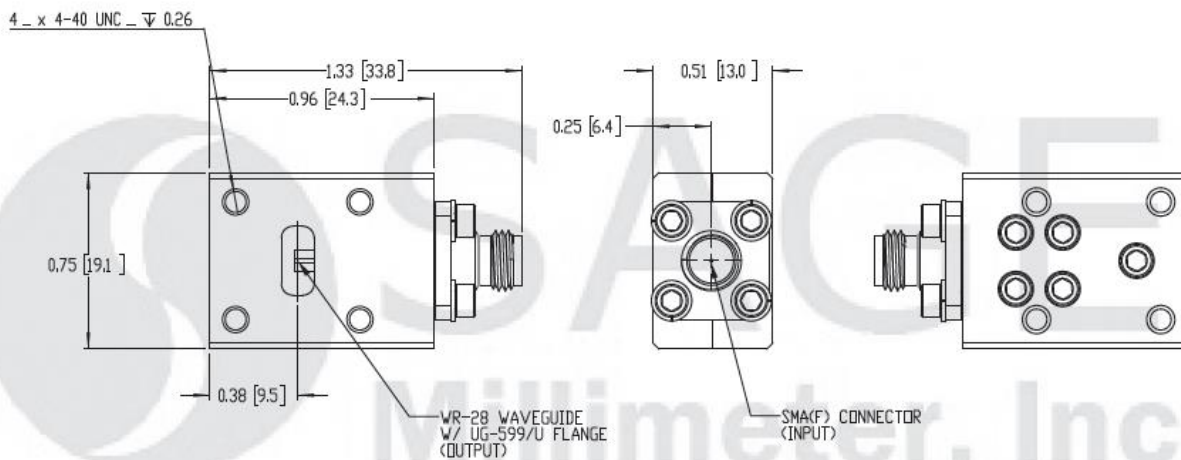
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Typical Output Power vs. Input Power

P_{in} : +10 dBm (Typ)



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.

