SFP-1041443N05-082F-S1-M

F-Band X3, 100 to 140 GHz, Passive Frequency Multiplier

SFP-1041443N05-082F-S1-M is a F-Band, X3 passive multiplier that utilizes GaAs pHEMT-based MMIC chip with a balanced circuit configuration to generate third order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 33.3 to 46.7 GHz at +17 dBm RF power to yield 100 to 140 GHz at -5 dBm. The multiplier is equipped with a female 2.4 mm connector as its input port and a WR-08 waveguide with a UG-387/U-M anti-cocking flange as its output port. Other interface configurations are offered under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	33.3 GHz		46.7 GHz
Output Frequency	100 GHz		140 GHz
Input Power	+16 dBm	+17 dBm	+20 dBm
Output Power		-5 dBm	
Harmonic Suppression		20 dB	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
Input Port	2.4 mm (F)
Output Power	WR-08 Waveguide with UG-387/U-M Anti-Cocking Flange
Case Material	Aluminum
Finish	Gold Plated
Weight	0.8 Oz
Size	0.75” (L) X 0.75” (W) X 0.75” (H)
Outline	FP-FC3-A-M

ECCN

3A001.b.7

FEATURES

- No External Bias
- Compact Design

APPLICATIONS

- Source Modules
- Communication Systems
- Radar Systems

SUPPLEMENTAL DETAILS

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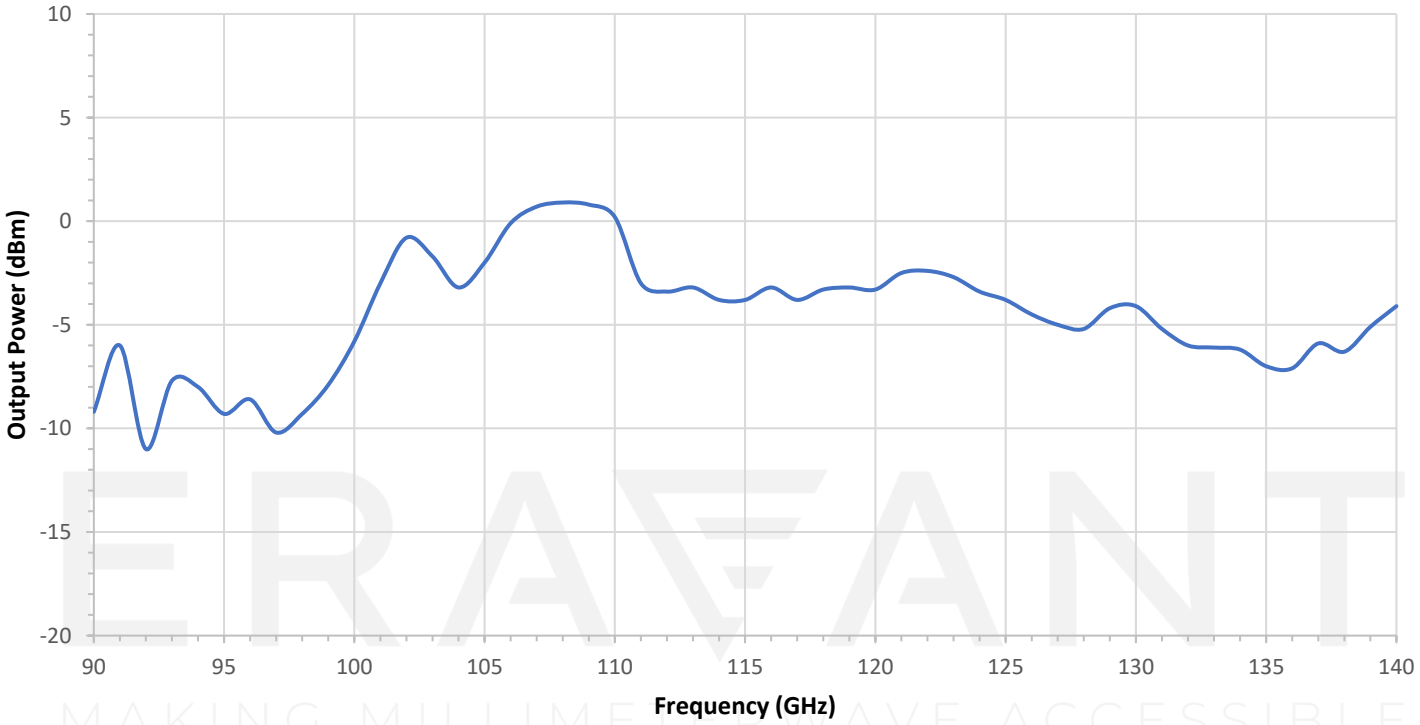
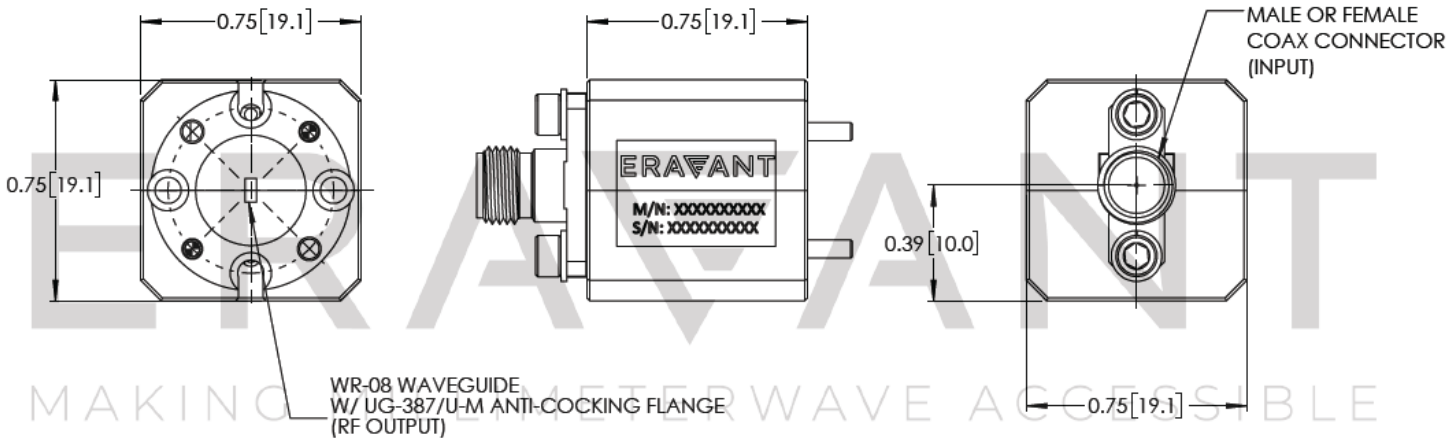
Output Power vs. Frequency

Input Power = +17 dBm



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



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NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit.
- All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings of the multiplier will damage the device.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- The multiplier is a static sensitive device. Always follow ESD rules when working with the multiplier.

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