

SFP-154214303-0515-SB

WR-05 X3, Passive Frequency Multiplier 150 to 210 GHz

SFP-154214303-0515-SB is a WR-05 X3 passive multiplier that utilizes GaAs Schottky diodes to generate third order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 50 to 70 GHz at +16 dBm RF power to yield typical +3 dBm output power at 150 to 210 GHz. The multiplier is equipped with a WR-15 waveguide and UG-385/U-M flange as its input port and a WR-05 waveguide and UG-387/U-M flange as its output port.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	50 GHz		70 GHz
Output Frequency	150 GHz		210 GHz
Input Power		+16 dBm	+20 dBm
Damage Input Power			+21 dBm
Output Power		+3 dBm	
Conversion Efficiency		5%	
Harmonic Suppression		20 dB	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
RF Input Port	WR-15 Waveguide with UG-385/U-M Flange
RF Output Port	WR-05 Waveguide with UG-387/U-M Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	0.75" (L) X 0.75" (W) X 0.75" (H)
Outline	FP-GV3-A-2

ECCN

3A001.b.7

FEATURES

- Low Conversion Loss
- Compact Package

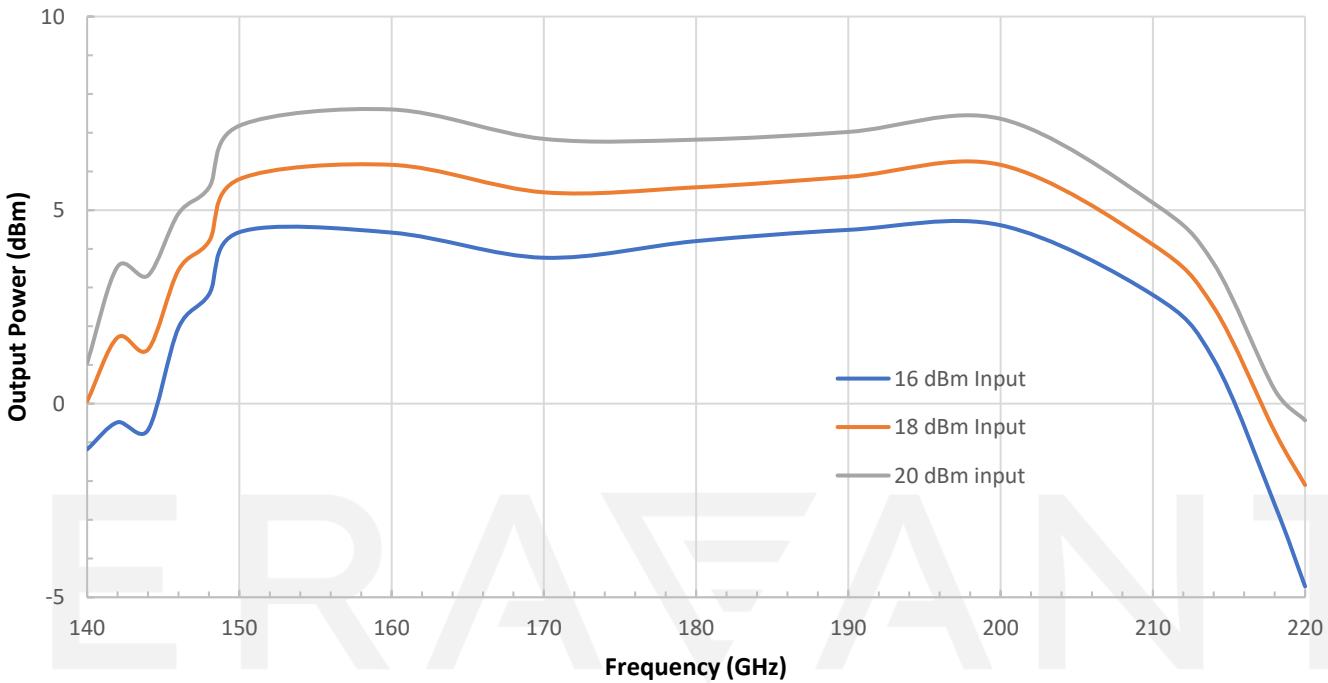
APPLICATIONS

- THz
- Source Modules
- Frequency Extenders

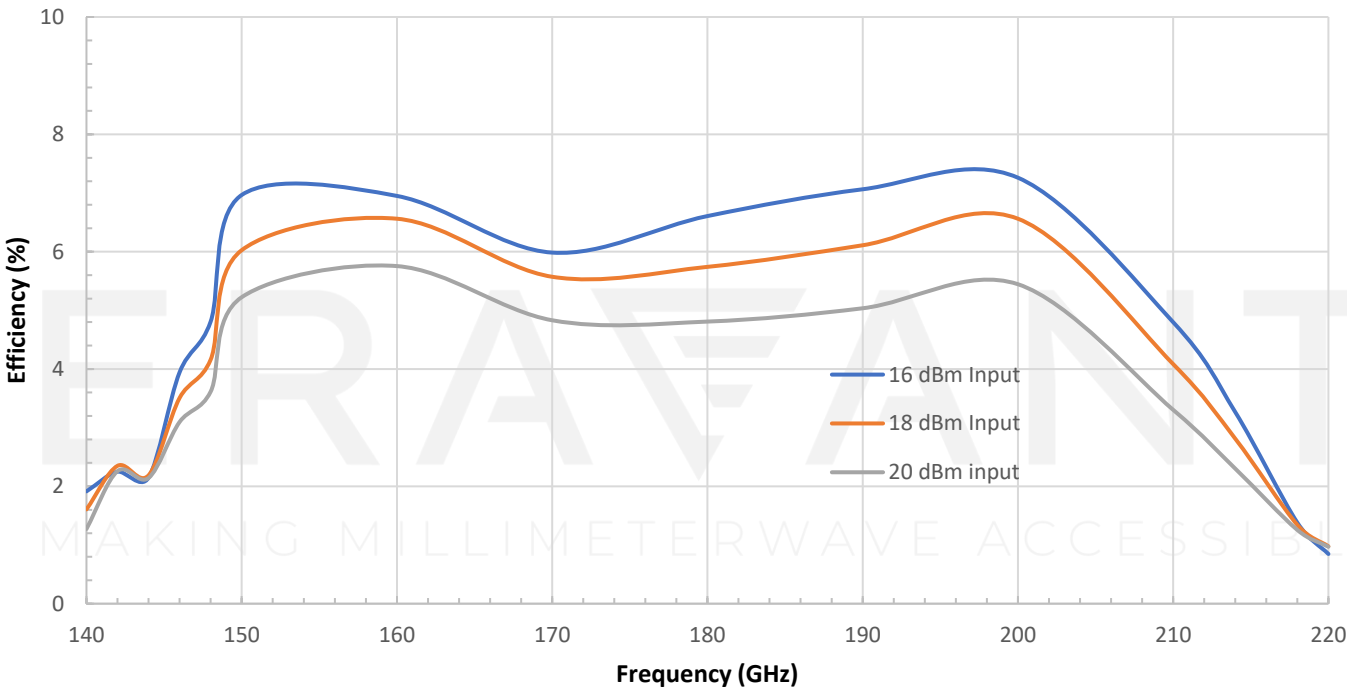
SUPPLEMENTAL DETAILS



Output Power vs. Frequency

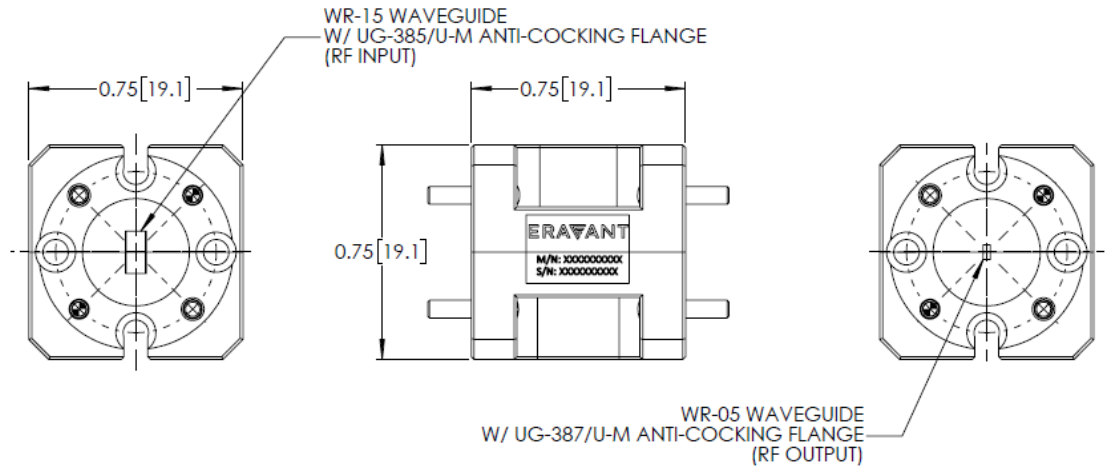


Conversion Efficiency vs. Frequency



SFP-154214303-0515-SB

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



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:

- RF power should never exceed 100 mW.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.