



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

Description:

Model SFP-154214303-0515-UEB 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.



Features:

- Low Conversion Loss
- Compact Package

Applications:

- THz
- Source Modules
- Frequency Extenders

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:

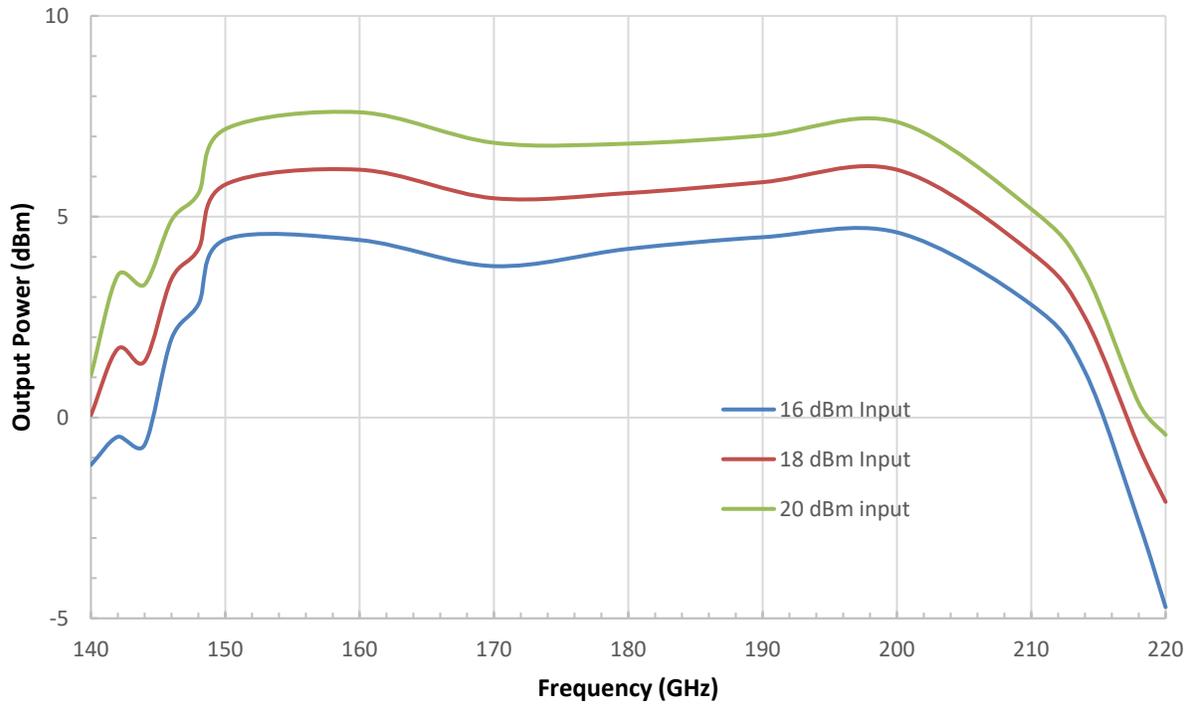
Item	Specification
RF Input Port	WR-15 Waveguide with UG-385/U-M Flange
RF Output Port	WR-05 Waveguide with UG-387/U-M Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	0.75" (L) X 0.75" (W) X 0.75" (H)
Outline	FP-GV3-A-2



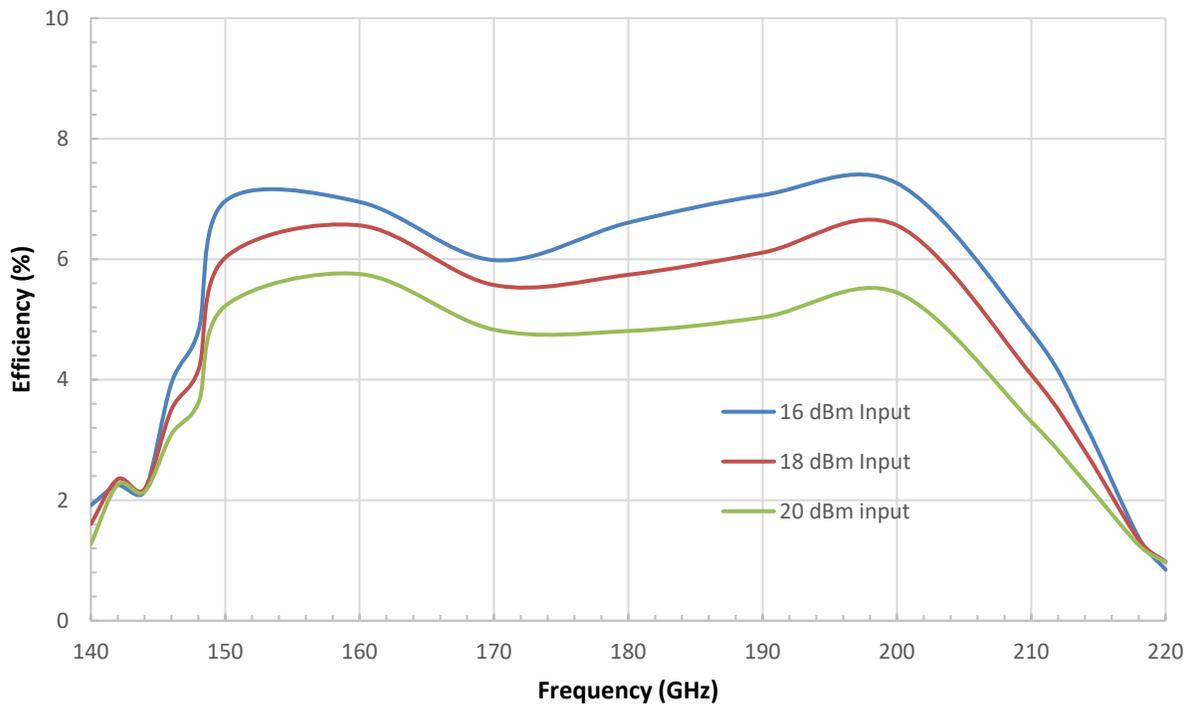


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Output Power vs. Frequency



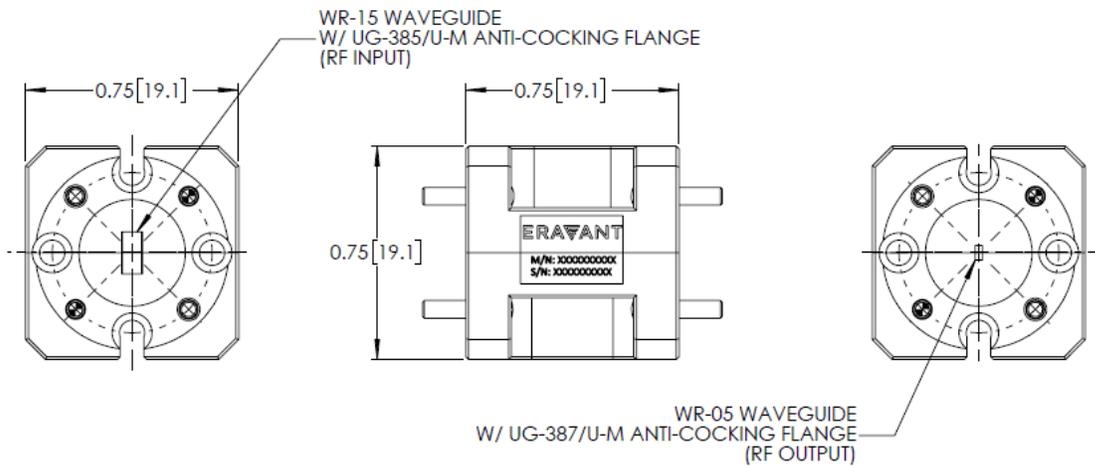
Conversion Efficiency vs. Frequency





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



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.
- Eravant 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.

