

SFP-114174210-0612-SB

WR-06 X2, Passive Frequency Multiplier, 110 to 165 GHz

SFP-114174210-0612-SB is a WR-06 X2 passive multiplier that generates second order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 55 to 82.5 GHz at +19 dBm RF power to yield typical +7 dBm output power at 110 to 165 GHz. The multiplier is equipped with a WR-12 waveguide and UG-387/U-M flange as its input port and a WR-06 waveguide and UG-387/U-M flange as its output port.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	55 GHz		82.5 GHz
Output Frequency	110 GHz		165 GHz
Input Power		+19 dBm	+20 dBm
Damage Input Power			+22 dBm
Output Power		+7 dBm	
Conversion Efficiency		6%	
Harmonic Suppression		20 dB	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
RF Input Port	WR-12 Waveguide with UG-387/U-M Flange
RF Output Port	WR-06 Waveguide with UG-387/U-M Flange
Bias Port	SMA (F)
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	0.75" (L) X 0.75" (W) X 0.75" (H)
Outline	FP-DE2-A

ECCN

3A001.b.7

FEATURES

- High Conversion Efficiency
- Compact Package

APPLICATIONS

- THz
- Source Modules
- Frequency Extenders

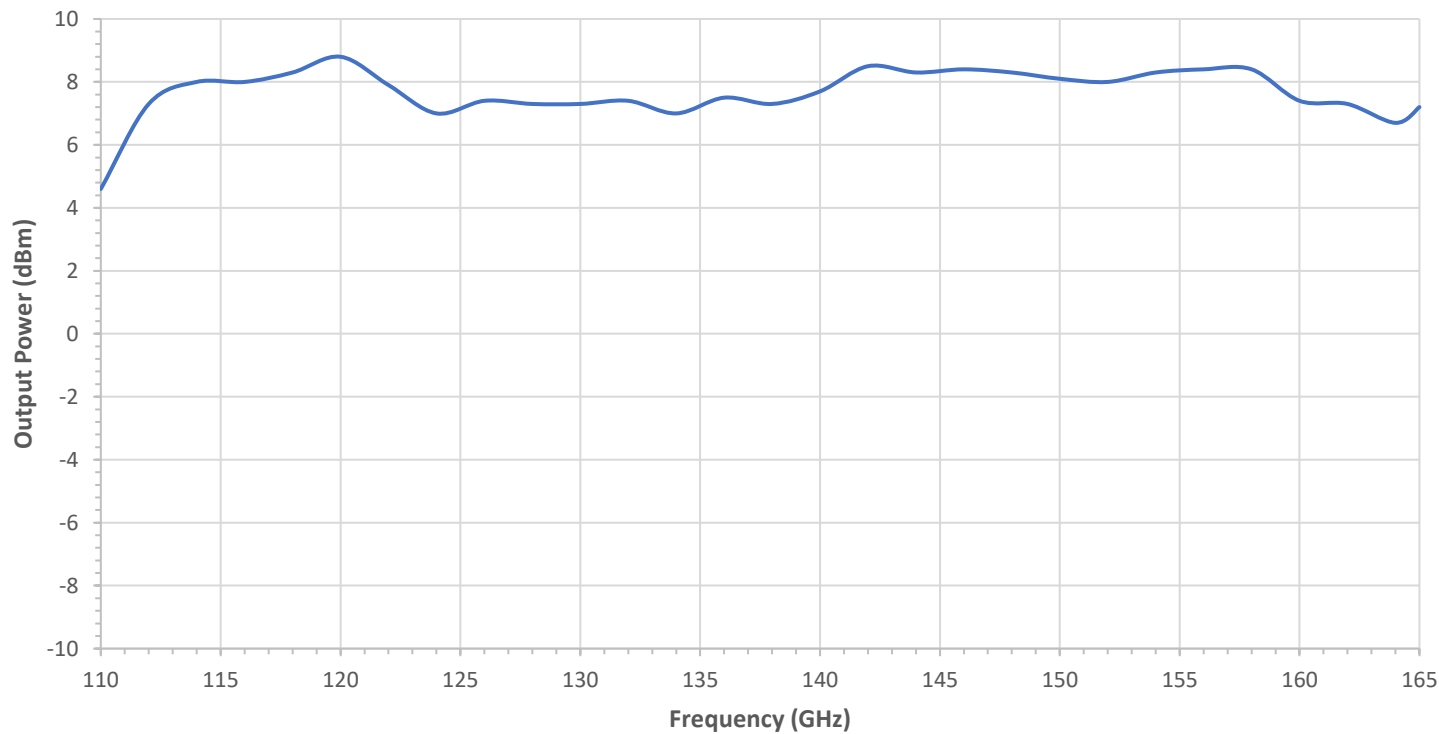
SUPPLEMENTAL DETAILS



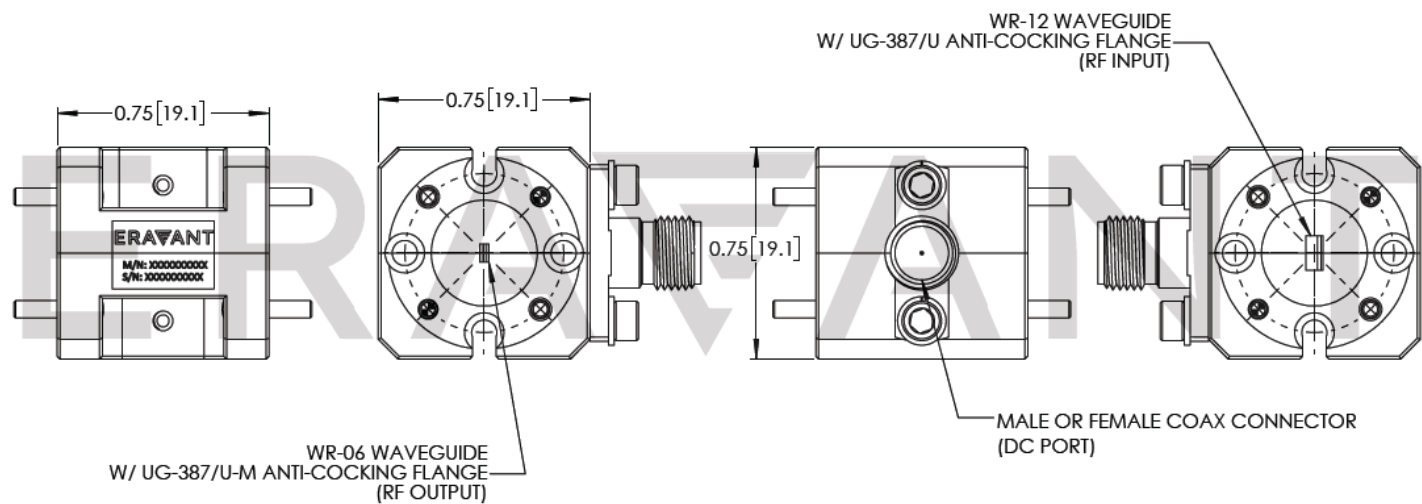
SFP-114174210-0612-SB

Output Power vs. Frequency

Input Power = +19 dBm



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 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.
- 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.
- Eravant recommends the use of ESD wrist and ankle straps, grounded ESD dissipative surfaces, and air ionizers when handling the device.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended

ERAVANT
MAKING MILLIMETERWAVE ACCESSIBLE

ERAVANT
MAKING MILLIMETERWAVE ACCESSIBLE