

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

### **Description:**

Model SFP-114174210-0612-UEB 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.



#### **Features:**

- High Conversion Efficiency
- Compact Package

## **Applications:**

- THz
- Source Modules
- Frequency Extenders

## **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	11
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



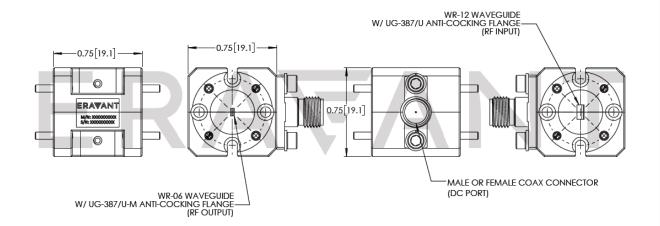
ESD

www.eravant.com | 501 Amapola Ave, Torrance, CA 90501 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com



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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.



