

## SFA-104114617-10SF-E1

### W-Band, X6 Active Frequency Multiplier, 100 to 113 GHz, +17 dBm

**SFA-104114617-10SF-E1** is an active X6 frequency multiplier. The multiplier has an input frequency of 16.67 to 18.83 GHz with a typical input power of +3 dBm and an output frequency of 100 to 113 GHz with a typical output power of +17 dBm. The multiplier also has a typical harmonic suppression of -15 dBc. The DC power requirement for the multiplier is +8 V<sub>DC</sub>/950 mA. The input port configuration is a female SMA connector and the output is a WR-10 waveguide with a UG-387/U-M anti-cocking flange. Other port configurations are available under different model numbers



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	16.67 GHz		18.83 GHz
Input Power		+3 dBm	+20 dBm
Output Frequency	100 GHz		113 GHz
Output Power		+17 dBm	
Harmonic Suppression		-15 dBc	
Spurious		-60 dBc	
DC Voltage		+8 V <sub>DC</sub>	+16 V <sub>DC</sub>
DC Supply Current		950 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

#### Mechanical Specifications:

Item	Specification
Input Port	SMA (F)
Output Port	WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.6 Oz
Size	1.10" (W) X 1.80" (L) X 0.75" (H)
Outline	FA-SW-2CW-A-1.8

#### ECCN

3A001.b.7

#### FEATURES

- Low Harmonic Components
- High Output Power

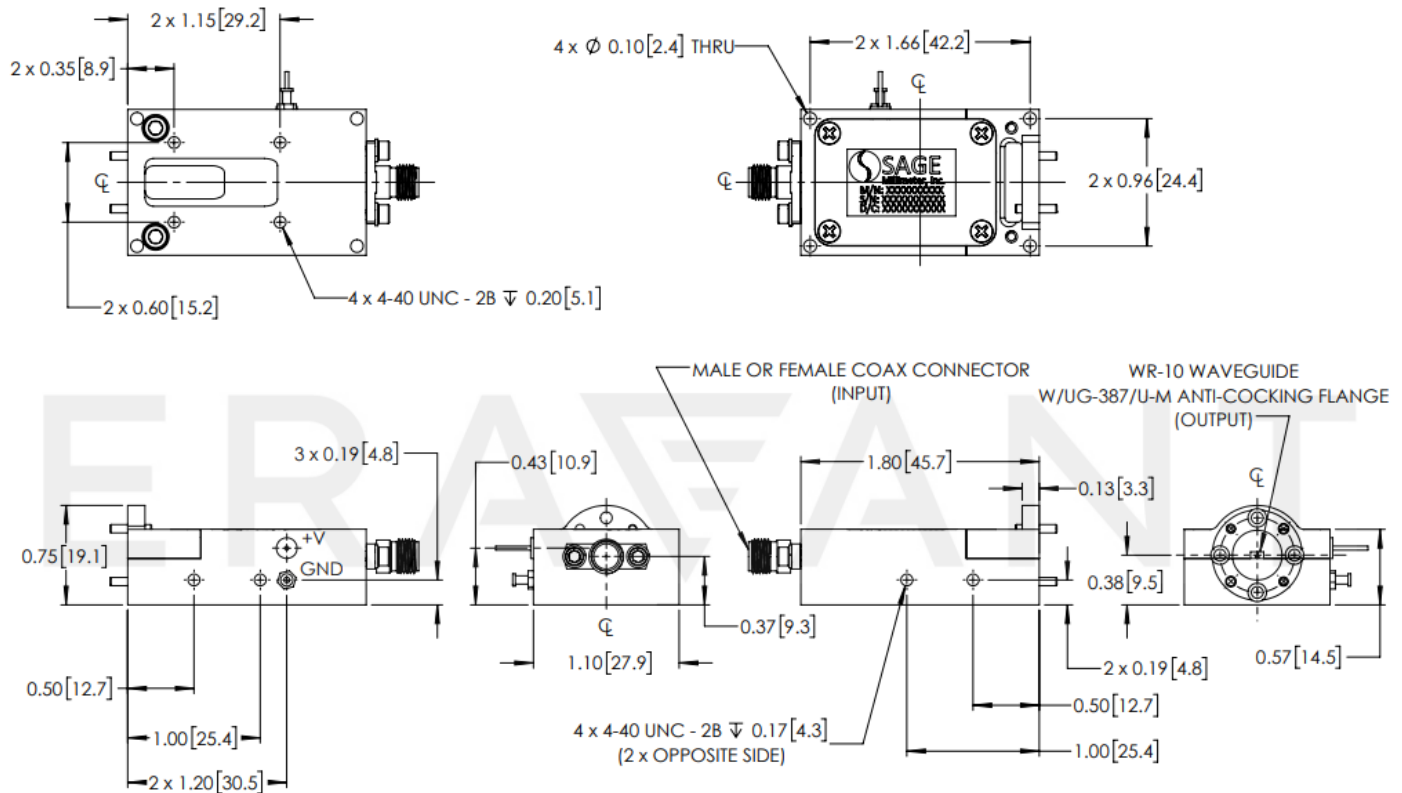
#### APPLICATIONS

- Frequency Extenders
- 6G Systems

#### SUPPLEMENTAL DETAILS



Bias: +8 V<sub>DC</sub>/950 mA



**NOTE:**

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- Eravant reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

**CAUTION:**

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- The case temperature of the device shall never exceed +50 °C. Use proper heatsink or fan if necessary.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

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