

## X2 Active Frequency Multiplier, 20 to 40 GHz, +20 dBm Pout

### Description:

**Model SFA-203403220-KFSF-S1-WP** is an active X2 frequency multiplier. The multiplier has an input frequency of 10 to 20 GHz with a typical input power of +5 dBm and an output frequency of 20 to 40 GHz with a typical output power of +20 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>/350 mA. The input port is a female SMA connector and the output is a female K connector. Other port configurations are available under different model numbers. This module is previously used and sold a well priced unit, the harmonic suppression is lower than other comparable modules. There is some very slight cosmetic wear and the bias pin has been previously soldered. Module test data for this unit is provided below.



### Features:

- Wide Band Coverage
- High Output Power

### Applications:

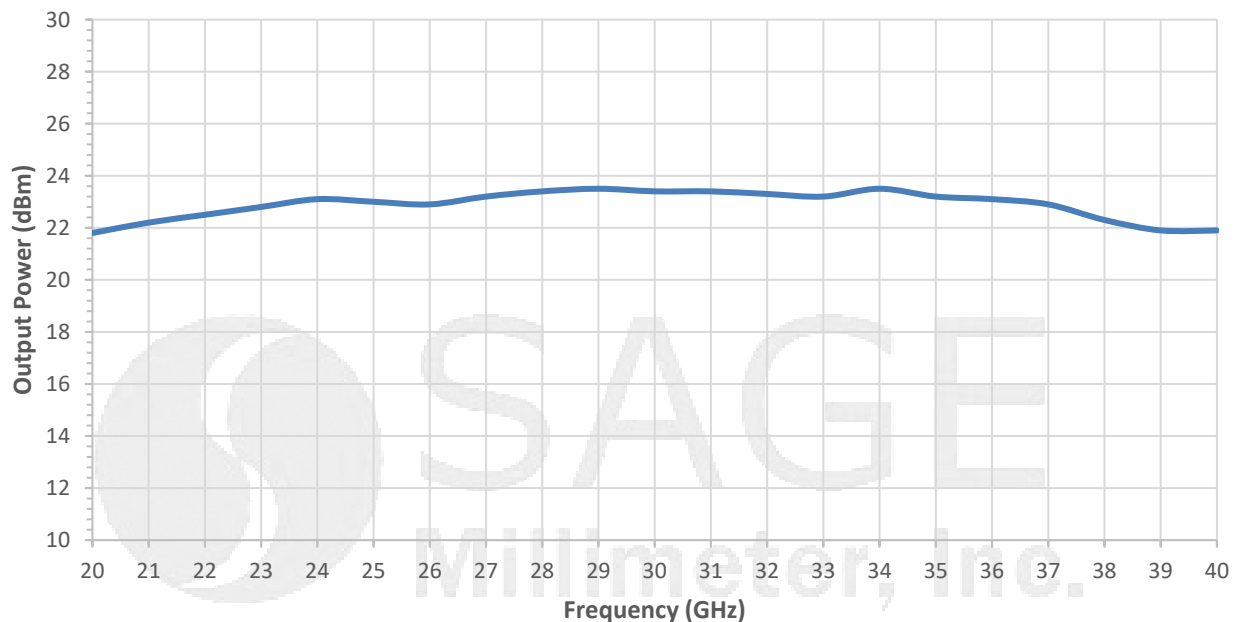
- 5G Systems
- Frequency Extenders
- Source Modules
- Communication Systems

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	10.0 GHz		20.00 GHz
Input Power	+1 dBm	+5 dBm	+10 dBm
Output Frequency	20.0 GHz		40.00 GHz
Output Power		+20 dBm	
Output Power Flatness (20 to 40 GHz)			1.7 dB
Harmonic Suppression		-15 dBc	
Spurious		-60 dBc	
Port Return Loss		10 dB	
DC Voltage	+6 V <sub>DC</sub>	+8 V <sub>DC</sub>	+12 V <sub>DC</sub>
DC Supply Current		350 mA	
Specification Temperature		+25 °C	
Case Temperature	0 °C		+50 °C

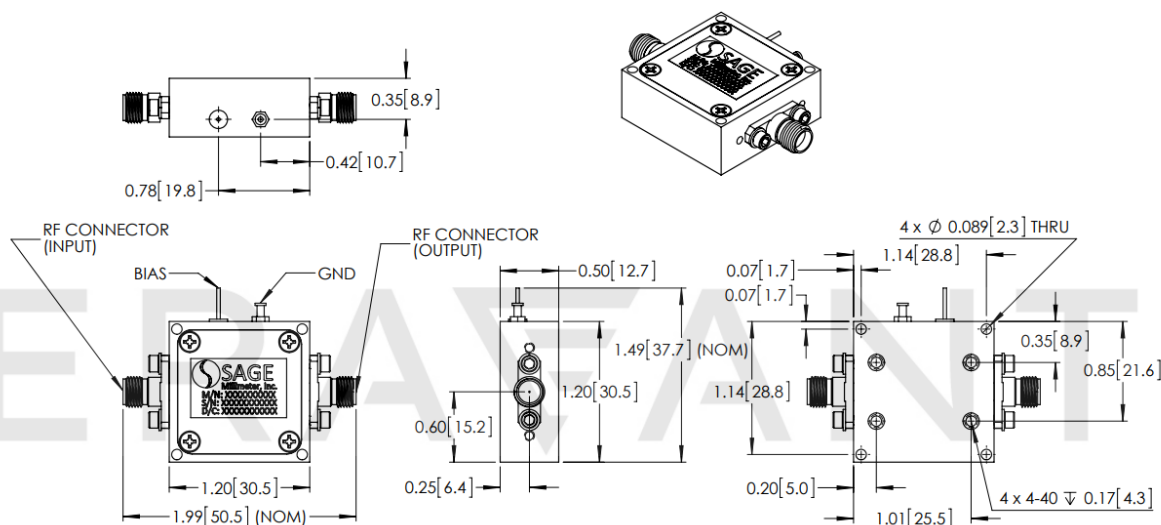
**X2 Active Frequency Multiplier, 20 to 40 GHz, +20 dBm Pout****Mechanical Specifications:**

Item	Specification
Input	SMA (F)
Output	K (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.20" (W) x 1.20" (L) x 0.50" (H)
Outline	BG-SC-1

**Output Power vs. Frequency**Bias: +8V<sub>DC</sub>/330 mA; Input Power = +5 dBmRF-saturation: +8V<sub>dc</sub>/350 mA

## X2 Active Frequency Multiplier, 20 to 40 GHz, +20 dBm Pout

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



**NOTE:**

RF CONNECTORS (INPUT & OUTPUT): SMA, K, 2.4MM, OR V  
• MALE OR FEMALE

**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.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

