



## X2 Active Frequency Multiplier, 54 to 66 GHz, +23 dBm

### Description:

**Model SFA-503663223-15KF-S1** is an active X2 frequency multiplier. The multiplier has an input frequency of 27 to 33 GHz with a typical input power of +5 dBm and an output frequency of 50 to 66 GHz with a typical output power of +23 dBm. The multiplier also has a typical harmonic suppression of -20 dBc. The DC power requirement for the multiplier is +8 V<sub>DC</sub>/800 mA. The input port configuration is a female K connector and the output is a WR-15 waveguide with a UG-385/U flange. Other port configurations are available under different model numbers.



### Features:

- Broadband Coverage
- High Output Power
- Low Harmonic Emission

### Applications:

- Frequency Extenders
- Source Modules
- Communication Systems

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	27.0 GHz		33.0 GHz
Input Power		+5 dBm	+10 dBm
Output Frequency	50.0 GHz		66.0 GHz
Output Power		+23 dBm	
Harmonic Suppression		-20 dBc	
Spurious		-60 dBc	
DC Voltage	+6 V <sub>DC</sub>	+8 V <sub>DC</sub>	+12 V <sub>DC</sub>
DC Supply Current		800 mA	
Specification Temperature		+25°C	
Case Temperature	0°C		+50°C

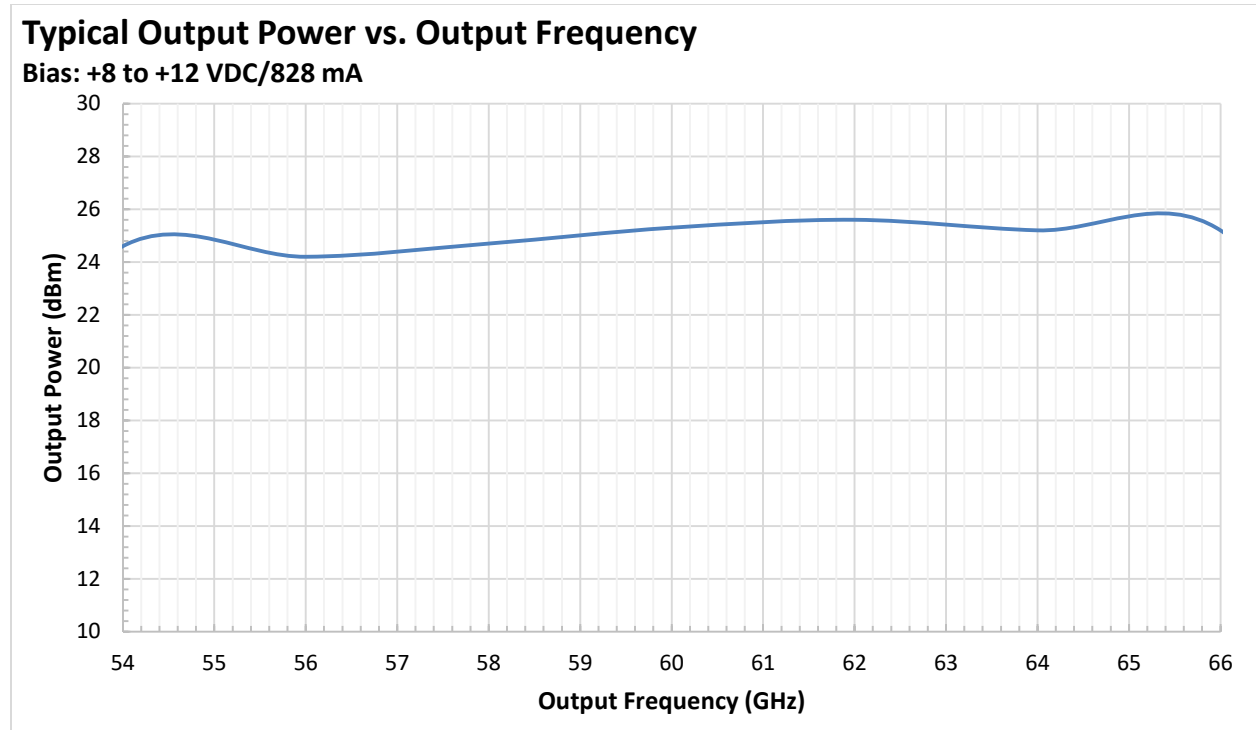
### Mechanical Specifications:

Item	Specification
Input	K(F)
Output	WR-15 Waveguide with UG-385/U Flange
Bias	Solder Pin
Size	1.10" (W) X 1.80" (L) X 0.50" (H)
Case Material	Aluminum
Finish	Gold Plated
Weight	1.4 Oz
Outline	FA-SV-1-1.8

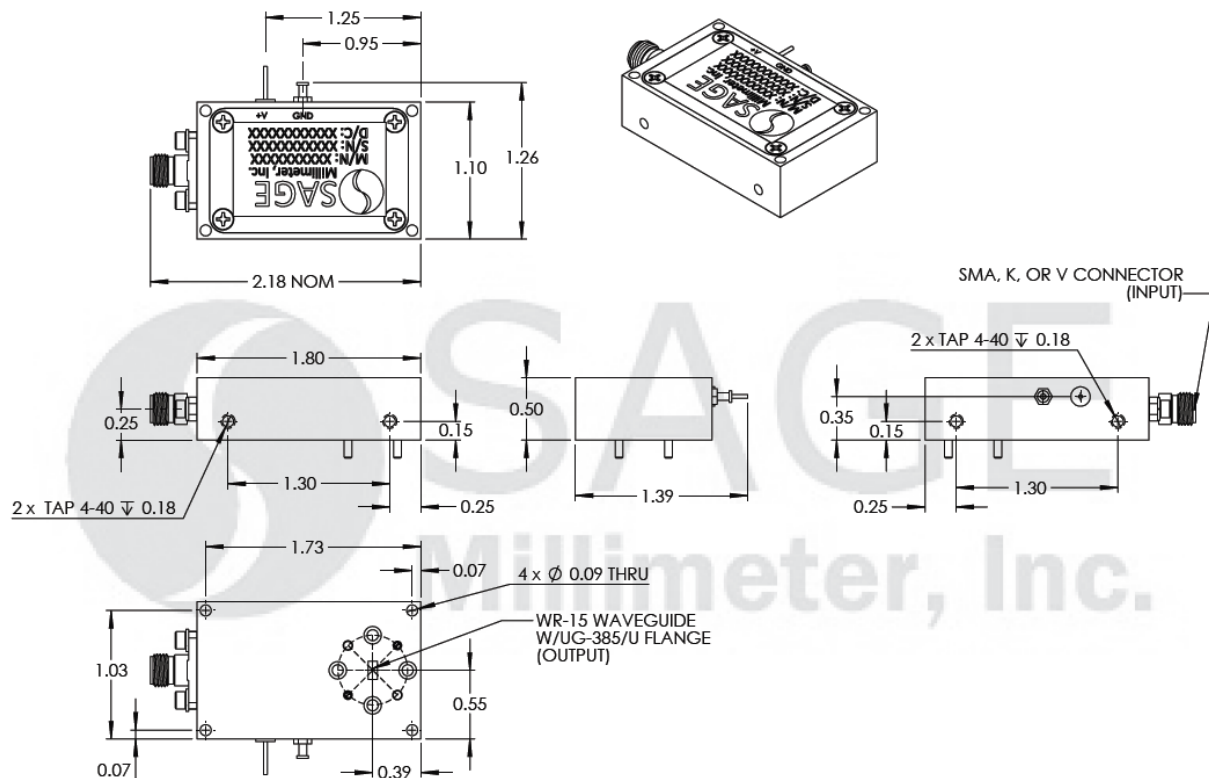




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**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches)





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### Note:

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

### Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.
- The case temperature of the device shall never exceed +50°C. Use a proper heatsink or fan if necessary.

