SFA-153253221-KFSF-S1

X2 Active Frequency Multiplier, 15 to 25 GHz, +21 dBm P_{out}

SFA-153253221-KFSF-S1 is an active X2 frequency multiplier. The multiplier has an input frequency of 7.5 to 12.5 GHz with a typical input power of +5 dBm and an output frequency of 15 to 25 GHz with a typical output power of +21 dBm. The multiplier also has a typical harmonic suppression of -20 dBc. The DC power requirement for the multiplier is +8 V_{DC}/180 mA. The input port is a female SMA connector and the output is a female 2.92 mm connector. Other port configurations are available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	7.5 GHz		12.5 GHz
Input Power		+5 dBm	+10 dBm
Output Frequency	15 GHz		25 GHz
Output Power		+21 dBm	
Harmonic Suppression		-20 dBc	
Spurious		-60 dBc	
Port Return Loss		10 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+15 V_{DC}
DC Supply Current		180 mA	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
Input Port	SMA (F)
Output Port	2.92 mm (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

ECCN

EAR99

FEATURES

- Wide Band Coverage
- High Output Power
- Low Harmonic Components

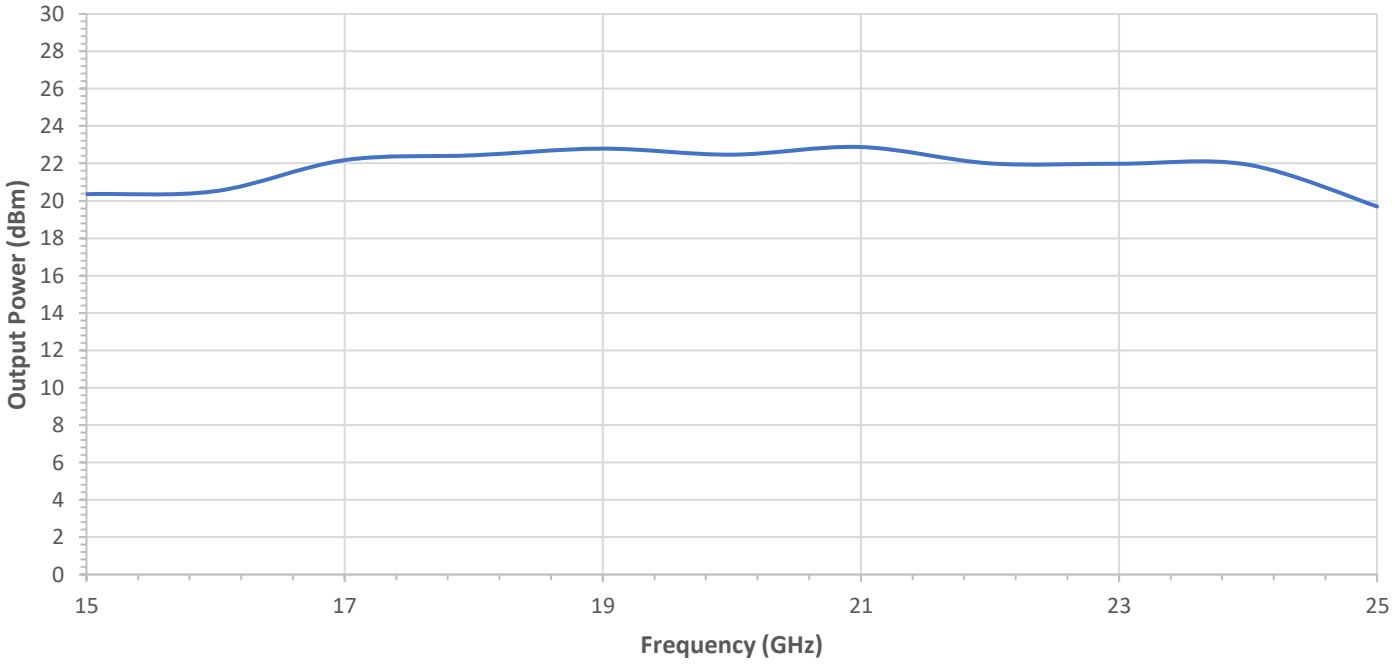
APPLICATIONS

- Frequency Extenders
- Source Modules

SUPPLEMENTAL DETAILS

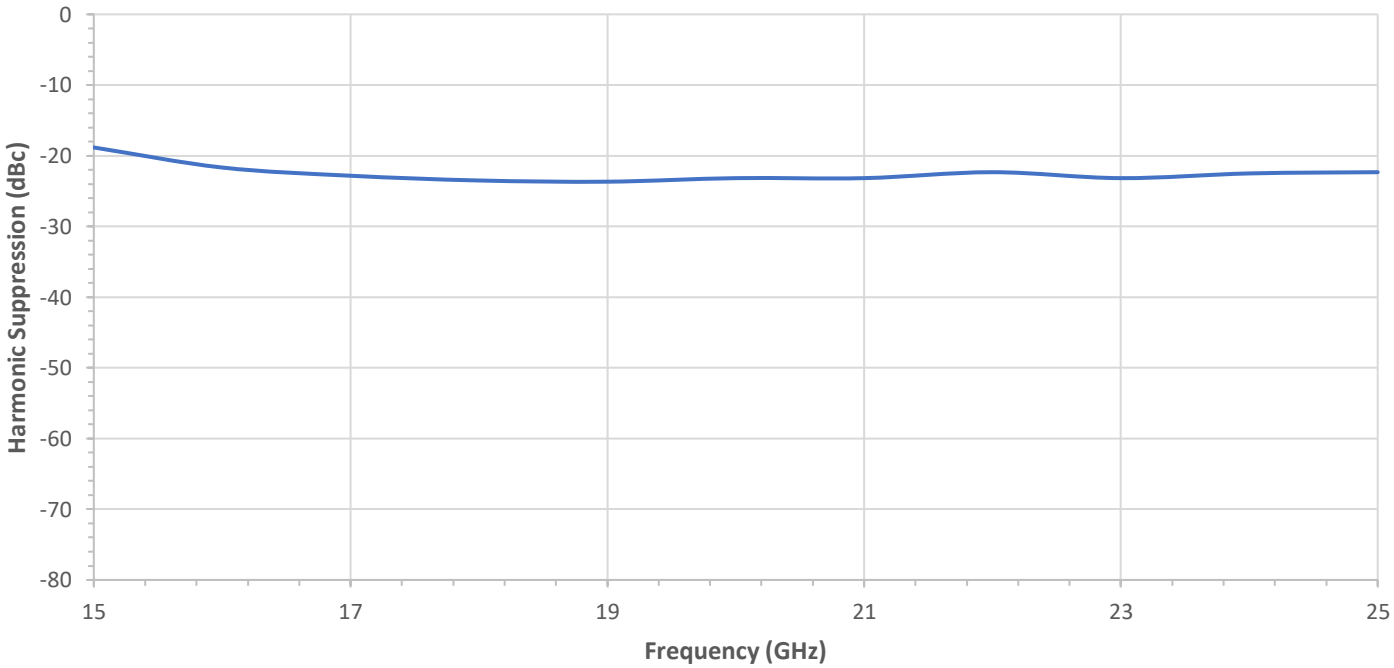
Output Power vs. Frequency

Bias: +8V_{DC}/180 mA; Input Power = +5 dBm

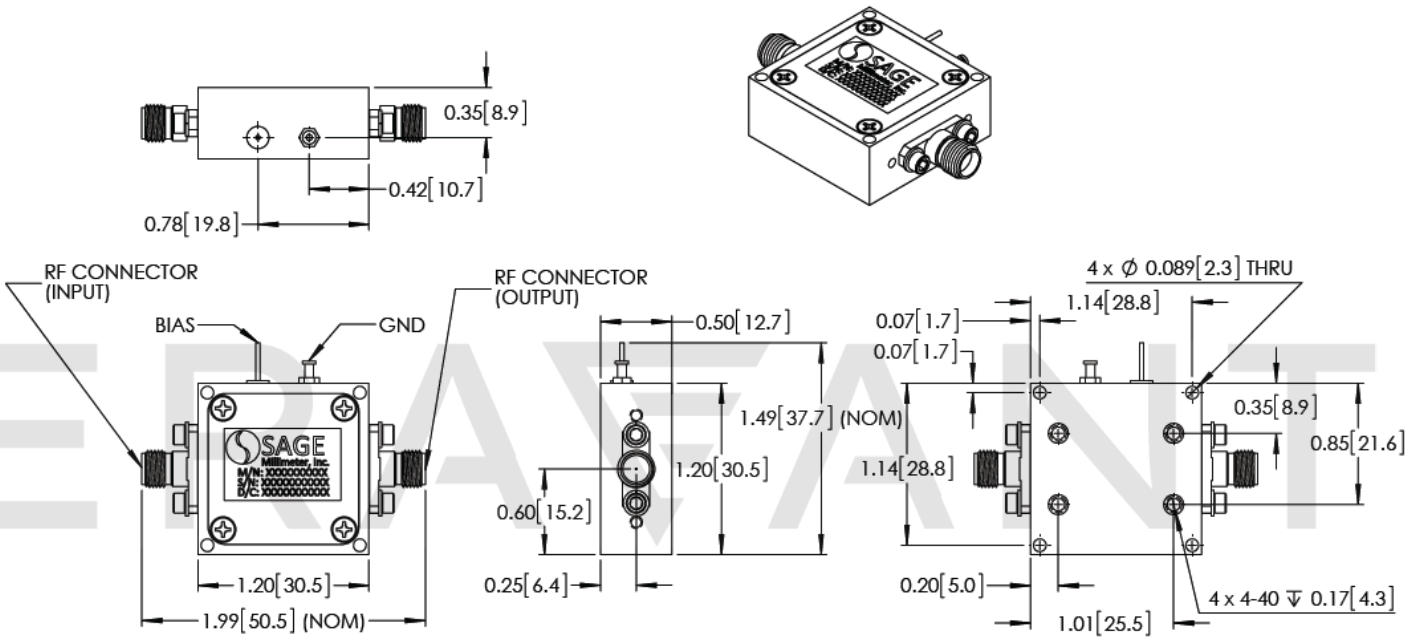


Harmonic Suppression vs. Frequency

Bias: +8V_{DC}/180 mA; Input Power = +5 dBm



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



NOTE:

- On condition that test data is provided it 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.
- 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.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- 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.