SFA-203403216-KFSF-S1

Advanced

X2 Active Frequency Multiplier, 20 to 40 GHz, +16 dBm Pout

Description:

Model SFA-203403216-KFSF-S1 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 +16 dBm. The multiplier also has a typical harmonic suppression of -20 dBc. The DC power requirement for the multiplier is +8 V_{DC}/300 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.

Features:

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

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		+16 dBm	
Harmonic Suppression		-20 dBc	
Spurious		-60 dBc	
Port Return Loss		10 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+12 V_{DC}
DC Supply Current		300 mA	
Specification Temperature		+25 ˚C	
Case Temperature	0 ˚C		+50 ˚C

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

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
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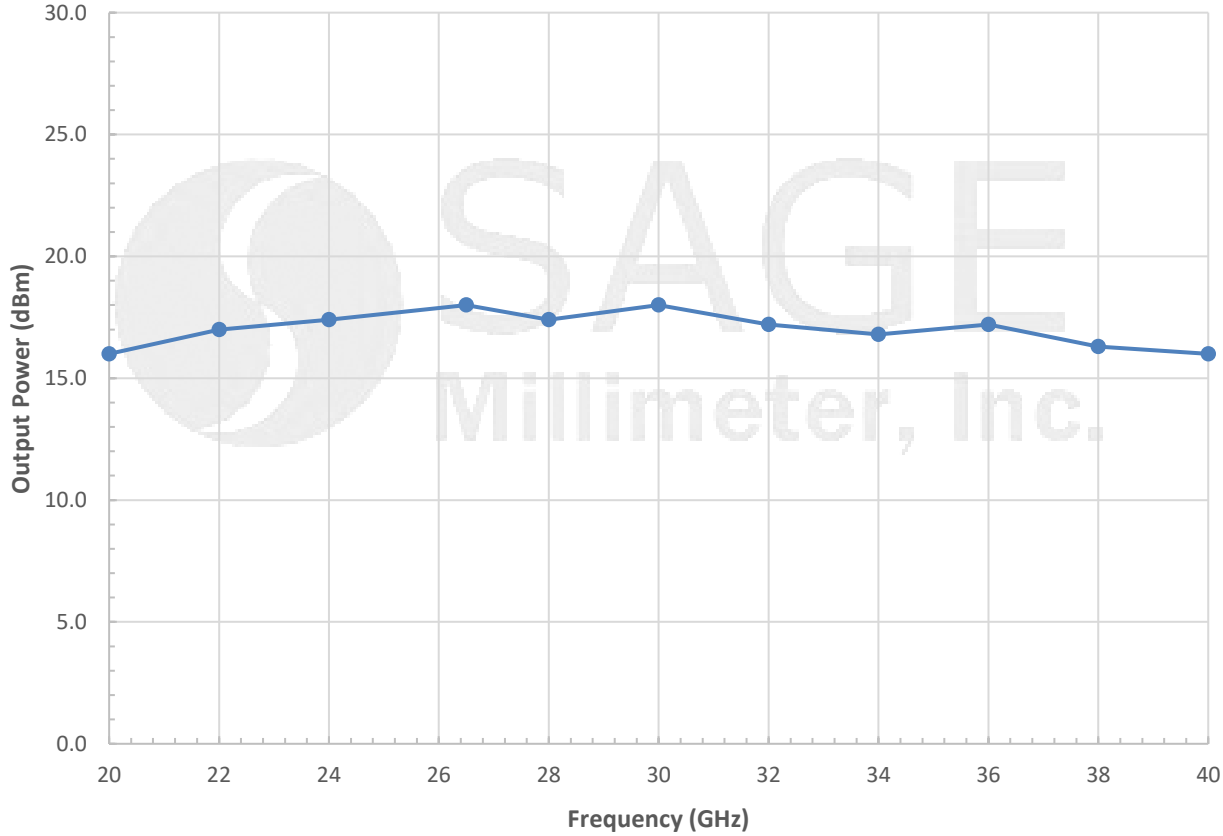
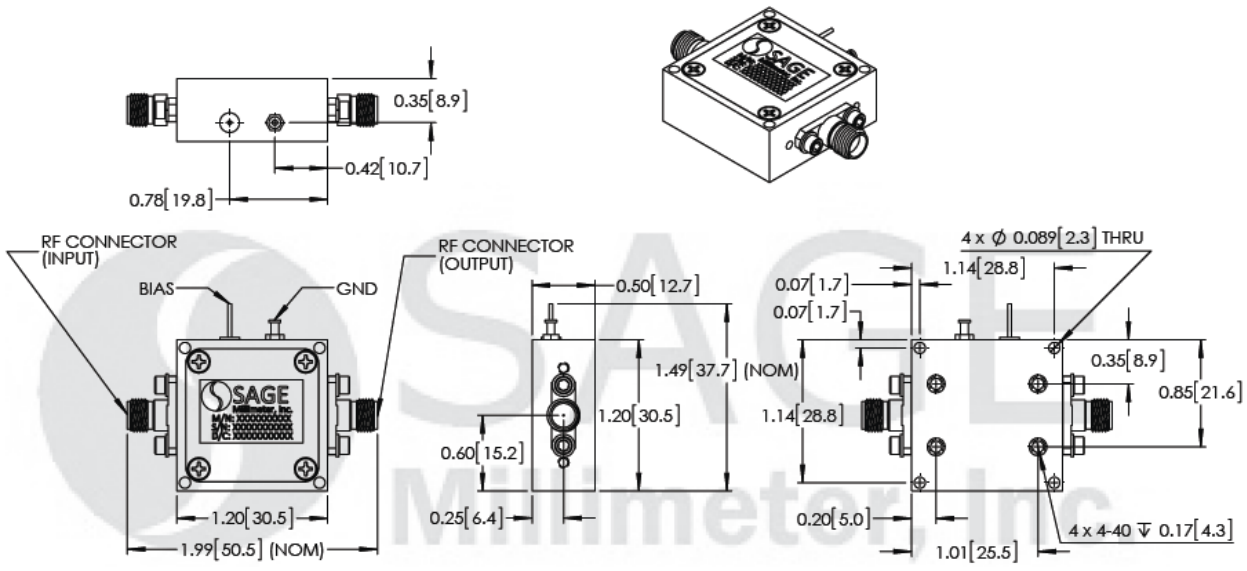
Typical Output Psat vs. Frequency

Bias = +8 V_{DC}/300 mA; Input Power: +5 dBm



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



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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.
- SAGE Millimeter, Inc. 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. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

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