

SFA-603703416-12SF-S1-WPC

E band, X4 Active Frequency Multiplier, 60 to 70 GHz, +16 dBm P_{out}

SFA-603703416-12SF-S1-WPC is an active X4 frequency multiplier. The multiplier has an input frequency of 15 to 17.5 GHz with a typical input power of +0 dBm and an output frequency of 60 to 70 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}/380 mA. The input port configuration is a female SMA connector and the output is a WR-12 waveguide with a UG-387/U anti-cocking flange. Other port configurations are available under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	15 GHz		17.5 GHz
Input Power	-3	0 dBm	+1 dBm
Output Frequency	60 GHz		70 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		380 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
Input Port	SMA (F)
Output Port	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.4 Oz
Size	1.10" (W) x 1.80" (L) x 0.50" (H)
Outline	FA-SE-1-A-1.8

ECCN

EAR99

FEATURES

- Low Harmonic Emission
- Broad Band Coverage
- High Output Power

APPLICATIONS

- Frequency Extenders
- Source Modules
- Communication Systems

SUPPLEMENTAL DETAILS

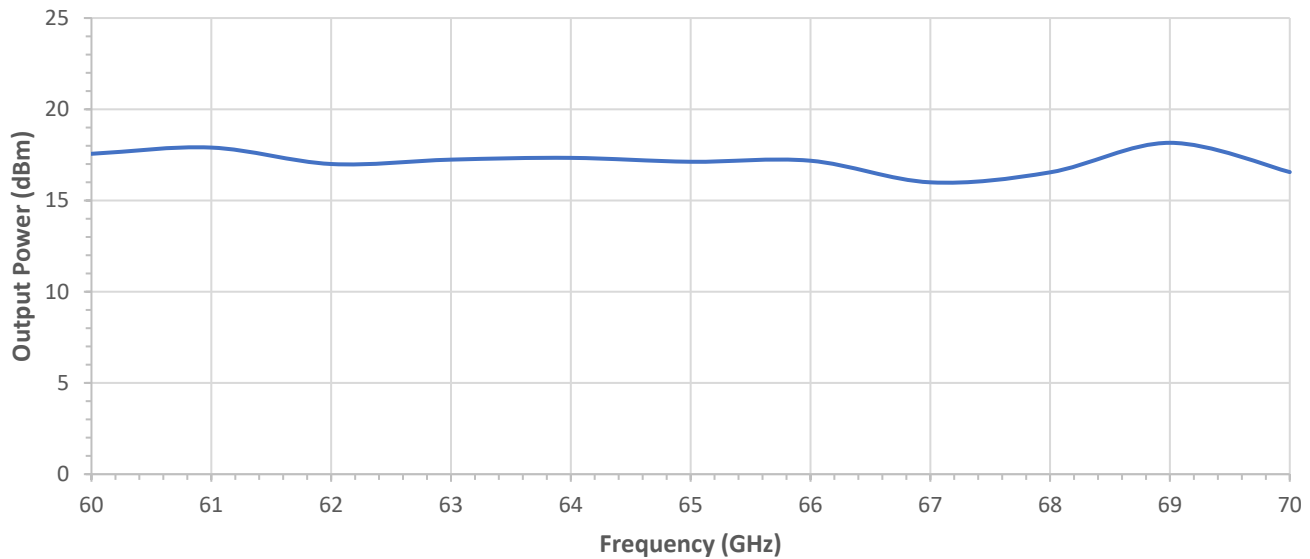


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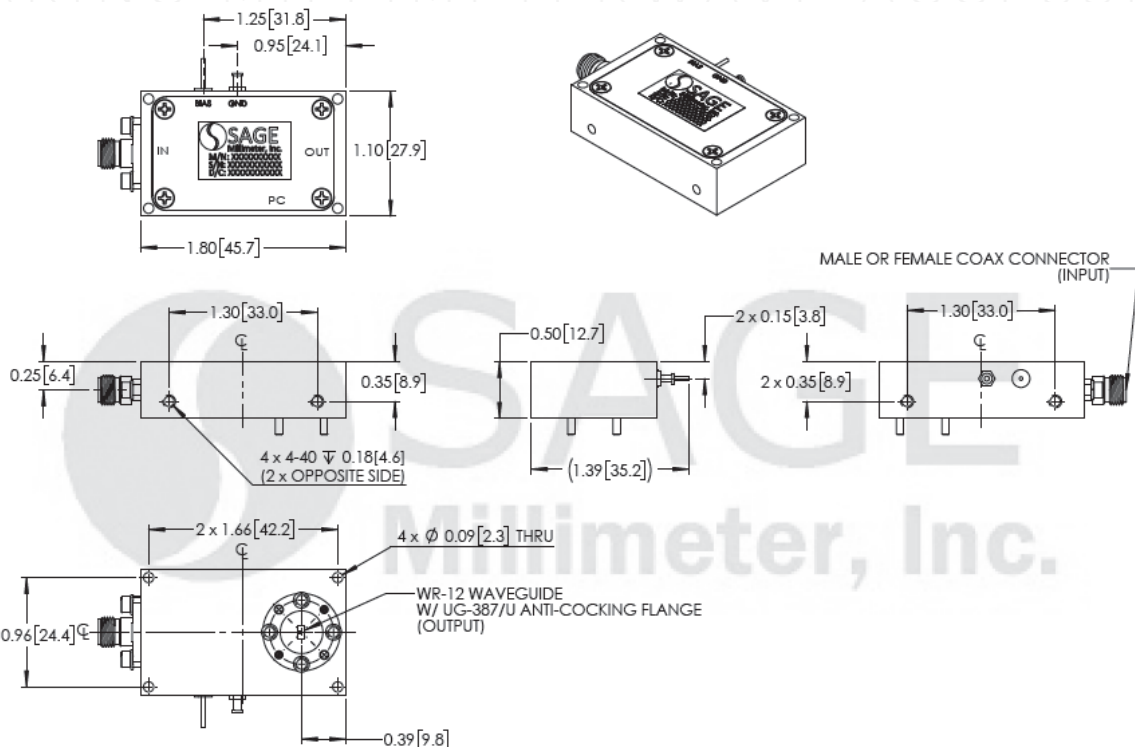
Output Power vs. Frequency

Bias: +8V_{DC}/392 mA; Input Power = -3 dBm

RFsat:+8Vdc/413 mA.



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



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

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