SBP-5836233128-VFVF-S1-HR

Advanced

V-Band Power Amplifier, 58 to 62 GHz, 31 dB Gain, +28 dBm P_{1dB}

Description:

Model SBP-5836233128-VFVF-S1-HR is designed and manufactured for secure communication systems. This porduct is a power amplifier with a typical small signal gain of 31 dB and a nominal P_{1dB} of +28 dBm across the frequency range of 58 to 62 GHz. The saturated output power of the amplifier is +29 dBm. The DC power requirement for the amplifier is +8 V_{DC}/2.9 A. The input and output ports are both female V connectors. Other port configurations, such as inline and right-angle waveguides, are also available under different model numbers.

Features:

- Broadband Performance
- High Output Power
- High Gain and Good Gain Flatness

Applications:

- IEEE 802.11ab WiGig
- Radar Systems
- Communication Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	58 GHz		62 GHz
Gain		31 dB	
P_{1dB}		+28 dBm	
P_{sat}		+29 dBm	
P_{in}			+22 dBm
Input Return Loss		10 dB	
Output Return Loss		8 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+15 V_{DC}
DC Supply Current		2.9 A	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
Input Port	V(F)
Output Port	V(F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	17 Oz
Size	3.15” (L) X 3.15” (W) X 3.48” (H)
Outline	BK-SC-C1-H

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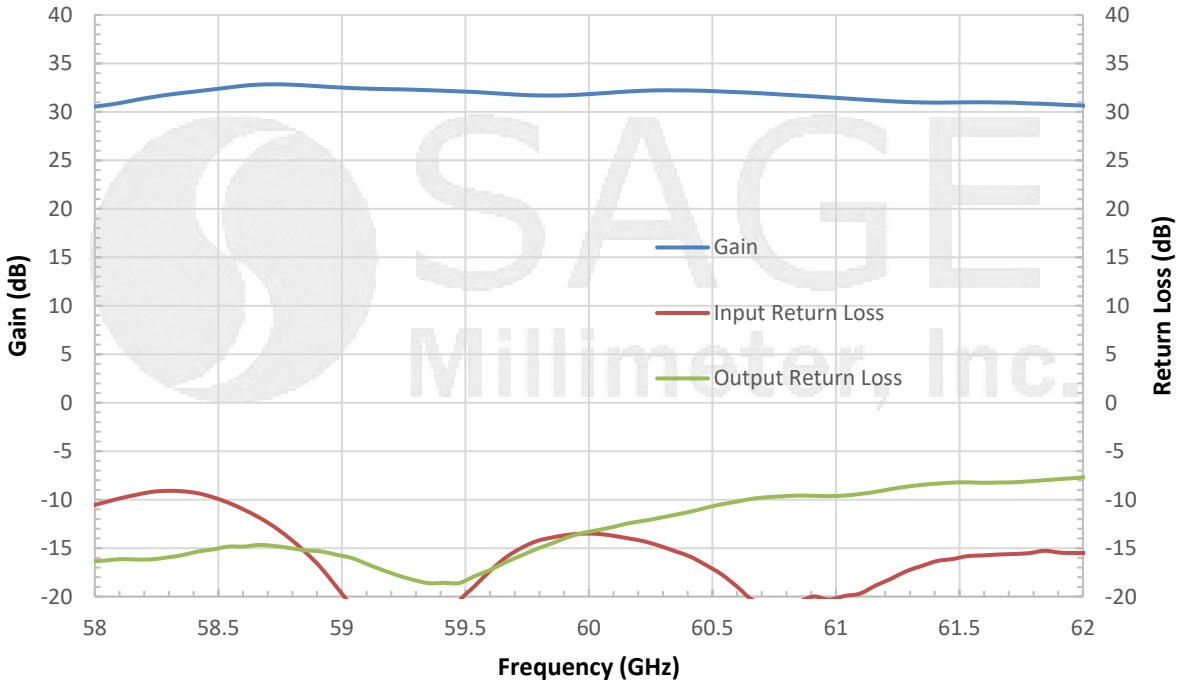
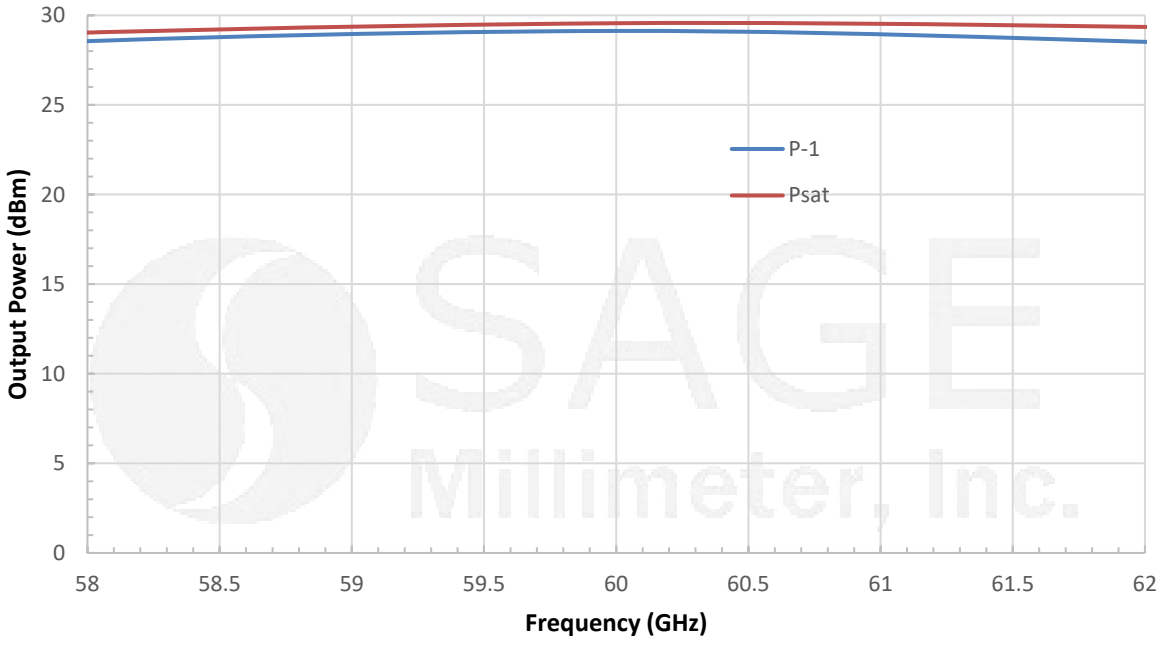
Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/2.9A



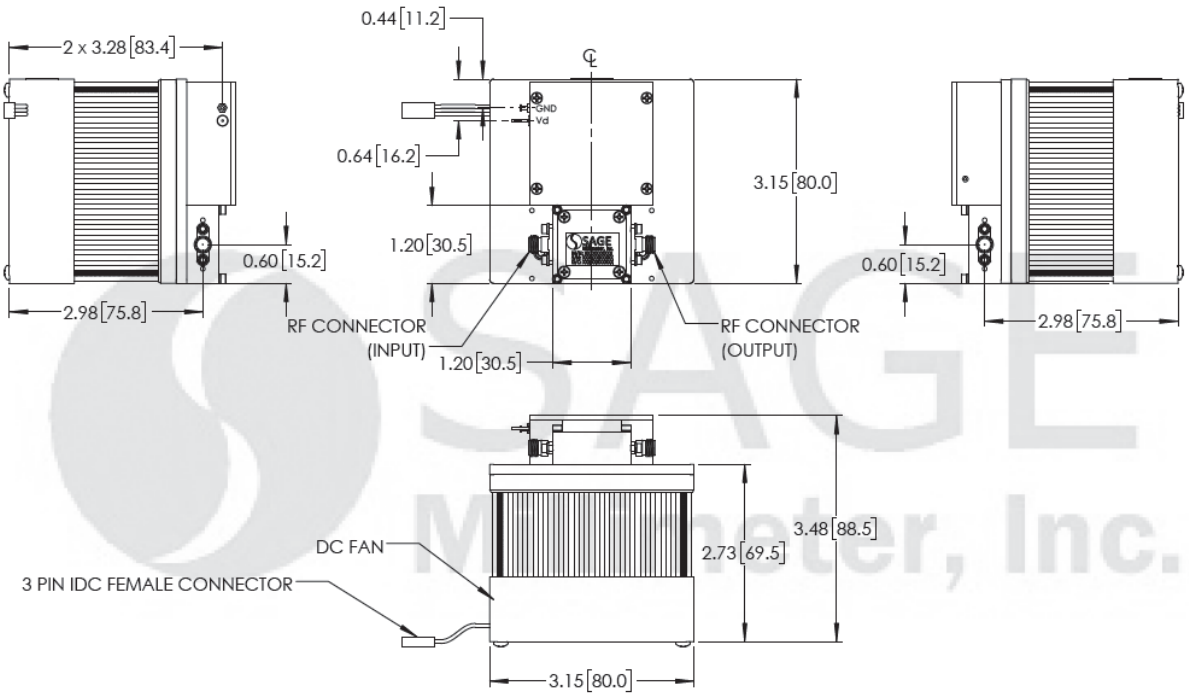
Output Power vs. Frequency

Bias: +8 V_{DC}/ 4.5 A



V-Band Power Amplifier, 58 to 62 GHz, 31 dB Gain, +28 dBm P_{1dB}

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.
- 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.