

E-Band Power Amplifier, 71 to 86 GHz, 30 dB Gain, +29 dBm P_{1dB}

Description:

Model SBP-7138633029-1212-E1-WP4 is a GaAs based power amplifier with a typical small signal gain of 30 dB and a nominal P_{1dB} of +29 dBm across the frequency range of 71 to 86 GHz. The DC power requirement for the amplifier is +8 V_{DC}/9 A. The mechanical configuration offers an inline structure with WR-12 waveguides and UG-387/U anti-cocking flanges. Other port configurations, 1 mm connectors for either input or output port, are also available under different model numbers.



Features:

- High Output Power
- High Gain
- Good Gain Flatness

Applications:

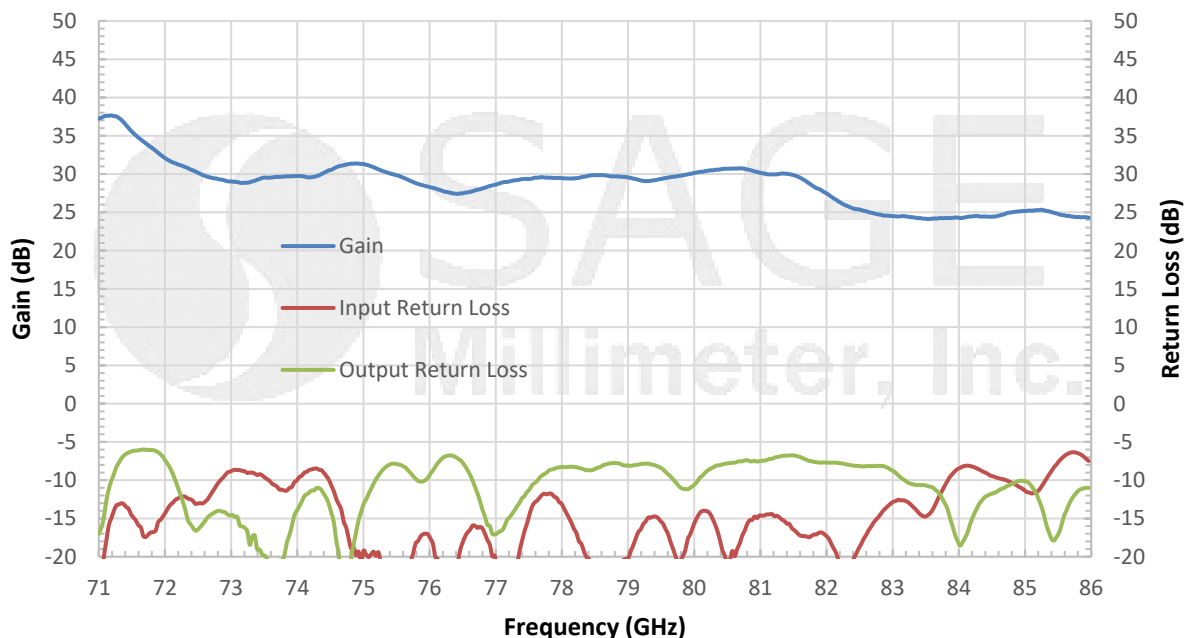
- Test Instrumentation
- Communication Systems
- Radar Systems

Electrical Specifications:

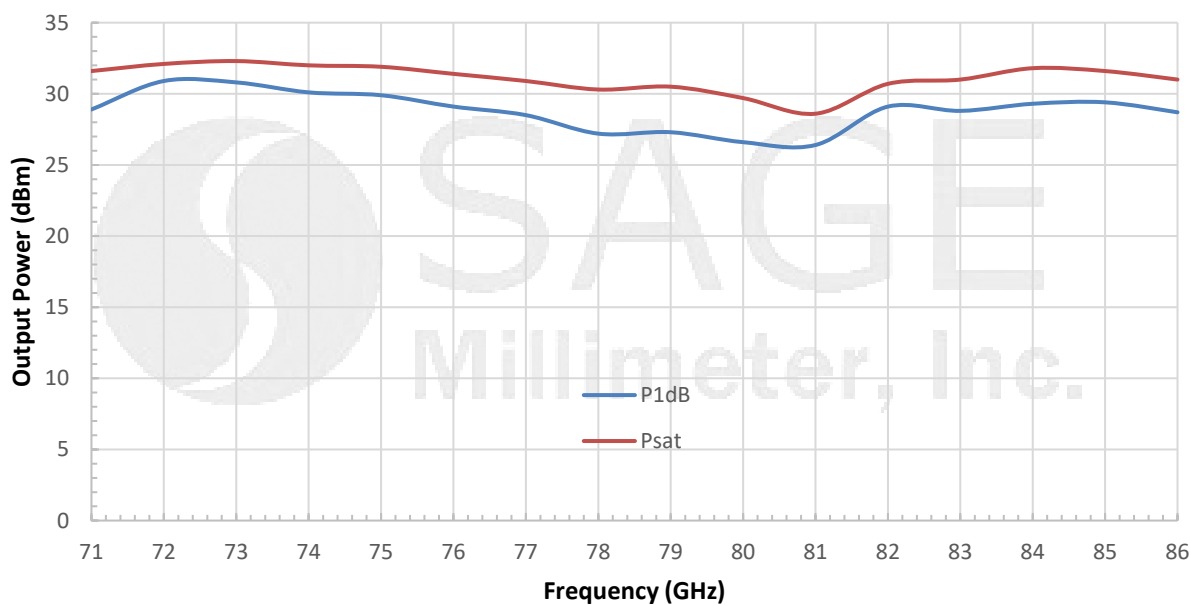
Parameter	Minimum	Typical	Maximum
Frequency	71 GHz		86 GHz
Gain		30 dB	
P _{1dB}		+29 dBm	
P _{Sat}		+31 dBm	
P _{in}			+15 dBm
Input Return Loss		8 dB	
Output Return Loss		6 dB	
DC Voltage	+6 V _{DC}	+8 V _{DC}	+15 V _{DC}
DC Supply Current		9 A	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
Input Port	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Output Port	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Bias	Terminal
Case Material	Aluminum
Finish	Gold Plated
Weight	26 Oz
Size	4.95" (W) X 4.60" (L) X 3.63" (H)
Outline	BP-SE-4-A

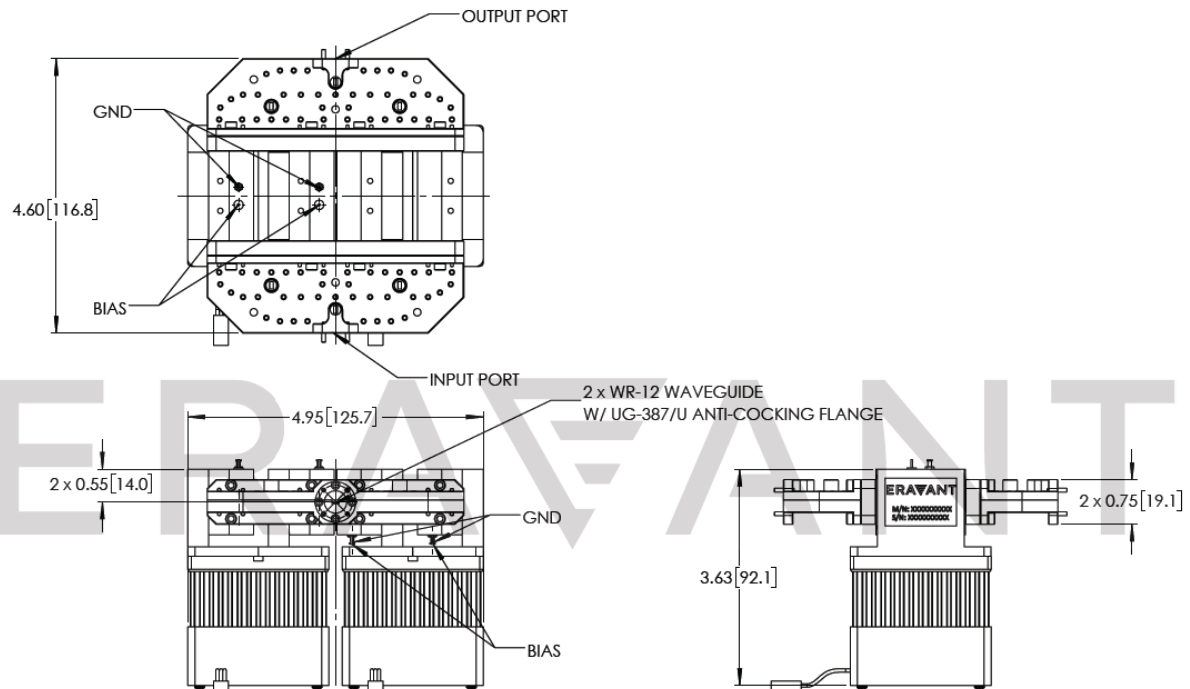
**E-Band Power Amplifier, 71 to 86 GHz, 30 dB Gain, +29 dBm P_{1dB}****Gain and Return Loss vs. Frequency**Bias: +8 V_{DC}/ 9,290 mA**Output Power vs. Frequency**Bias: +8 V_{DC}/ 9,290 mA

RFsat: +8 Vdc/ 13,800 mA



E-Band Power Amplifier, 71 to 86 GHz, 30 dB Gain, +29 dBm P_{1dB}

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



Note:

- 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.

