SBP-6038533026-1212-E1

E-Band GaN Power Amplifier, 30 dB Gain, +26 dBm P_{sat}

SBP-6038533026-1212-E1 is an ultra broad band GaN power amplifier with a typical small signal gain of 30 dB and P1dB of +22 dBm in the frequency range of 60 to 85 GHz. The saturated output power of the amplifier is +26 dBm. The DC power requirement for the amplifier is +16 VDC/500 mA. The mechanical configuration offers an inline structure with WR-12 waveguides and UG-387/U anti-cocking flanges. Other port configurations, such as with 1 mm connectors or the right angle structure with WR-12 waveguides, are also available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	60 GHz		85 GHz
Gain		30 dB	
P_{1dB}		+22 dBm	
P_{sat}		+26 dBm	
P_{in}			+15 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage	+15.5 V_{DC}	+16 V_{DC}	+18 V_{DC}
DC Supply Current		500 mA	
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	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.6 Oz
Size	1.10” (W) X 1.50” (L) X 0.75” (H)
Outline	BG-SE-2-A

ECCN

EAR99

FEATURES

- High Output Power

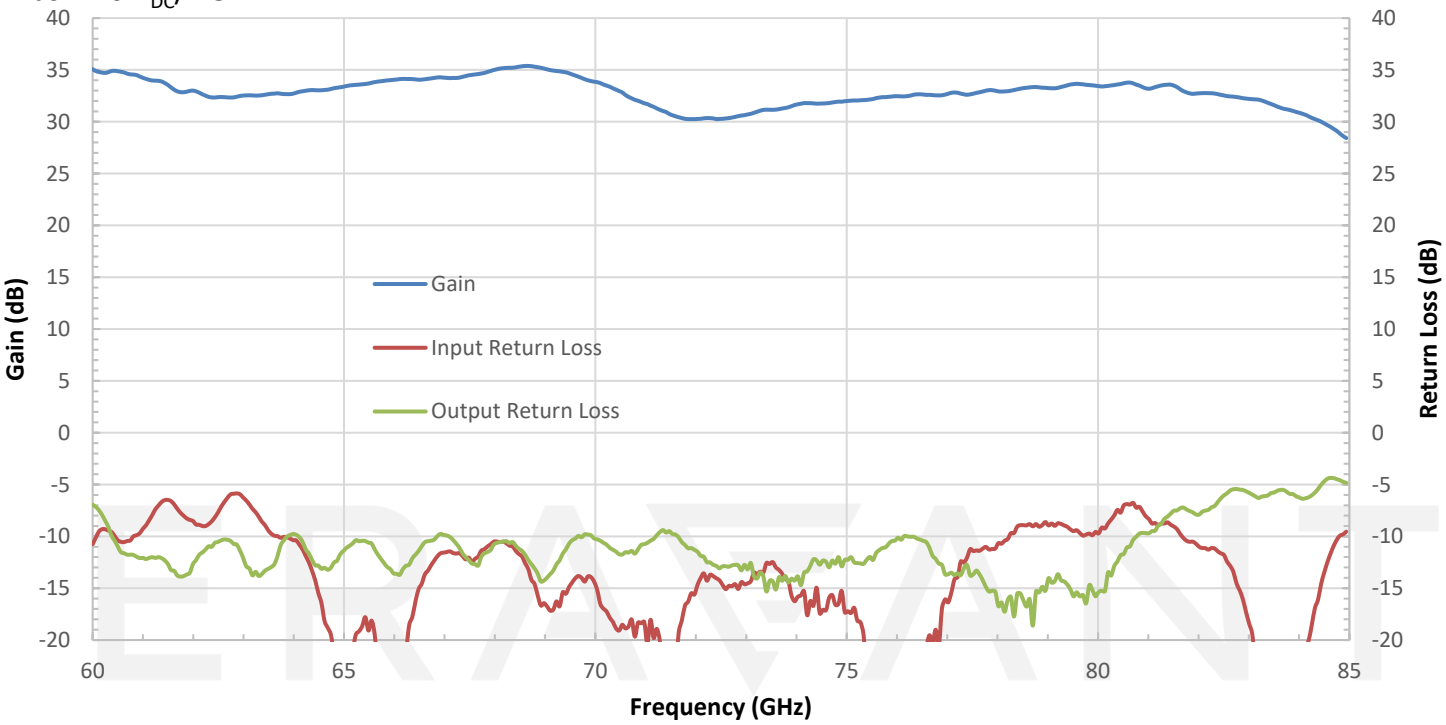
APPLICATIONS

- Radar Systems
- Test Equipment

SUPPLEMENTAL DETAILS

Gain and Return Loss vs. Frequency

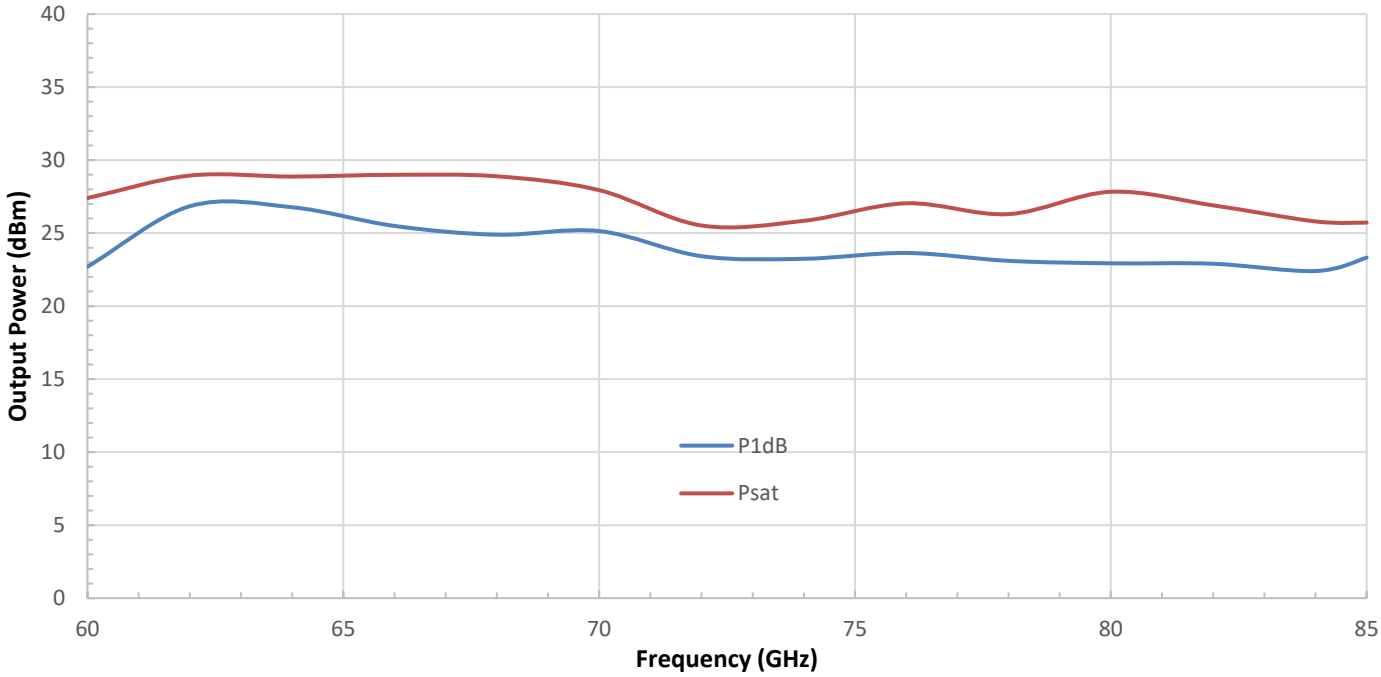
Bias: +16 V_{DC}/ 487 mA



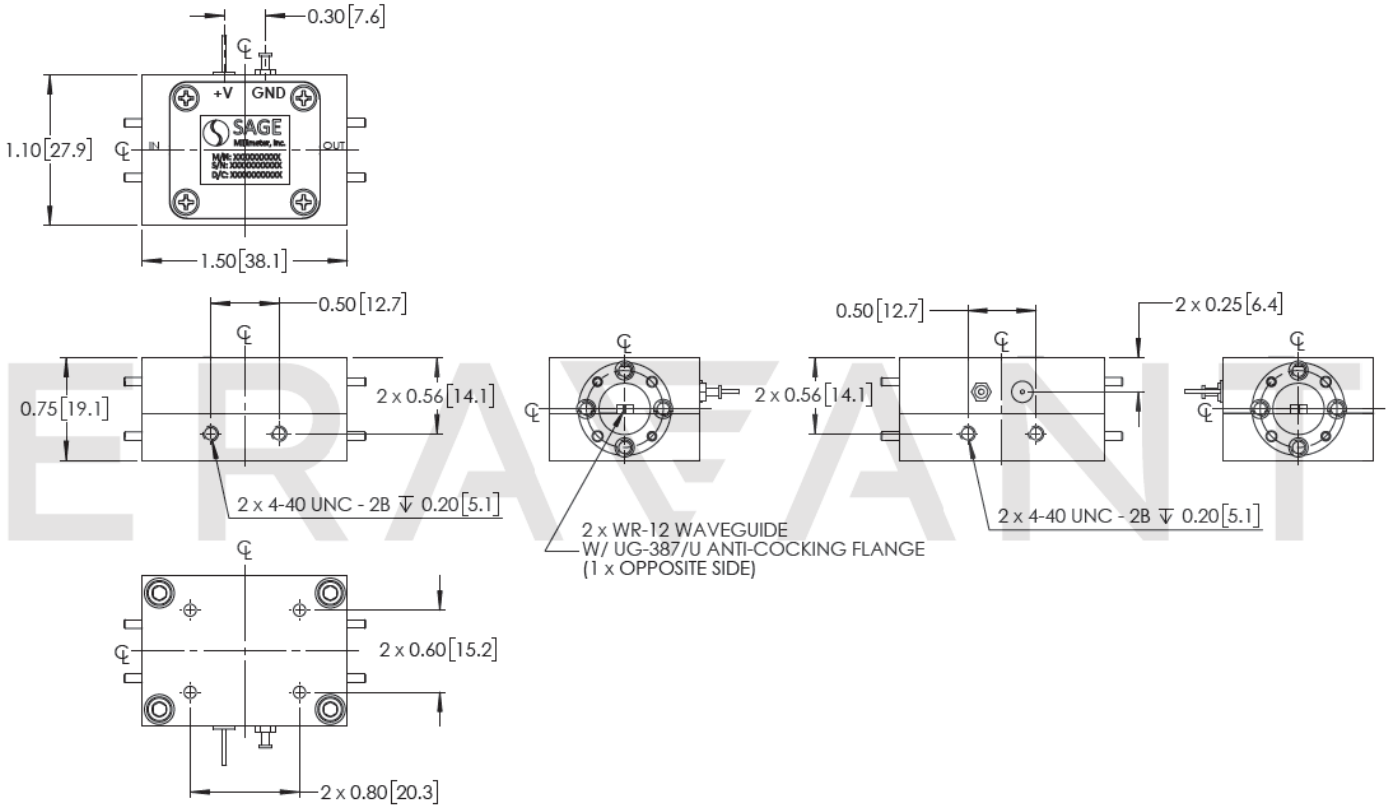
Output Power vs. Frequency

Bias: +16 V_{DC}/ 487 mA

RFsat: +16 Vdc/ 700 mA



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.