SBP-7538131624-1212-S1

E-Band Power Amplifier, 16 dB Gain, +23 dBm P_{sat}

SBP-7538131624-1212-S1 is a power amplifier with a typical small signal gain of 16 dB and saturated output power of the amplifier is +23 dBm. The DC power requirement for the amplifier is +8 to+12 V_{DC}/750 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	75 GHz		81 GHz
Gain		16 dB	
P_{1dB}		+21 dBm	
P_{sat}		+23 dBm	
P_{in}			+16 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+8 V_{DC}	+15 V_{DC}
DC Supply Current		750 mA	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
Input Ports	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Output Ports	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-1

ECCN

3A001.b.4

FEATURES

- High Output Power

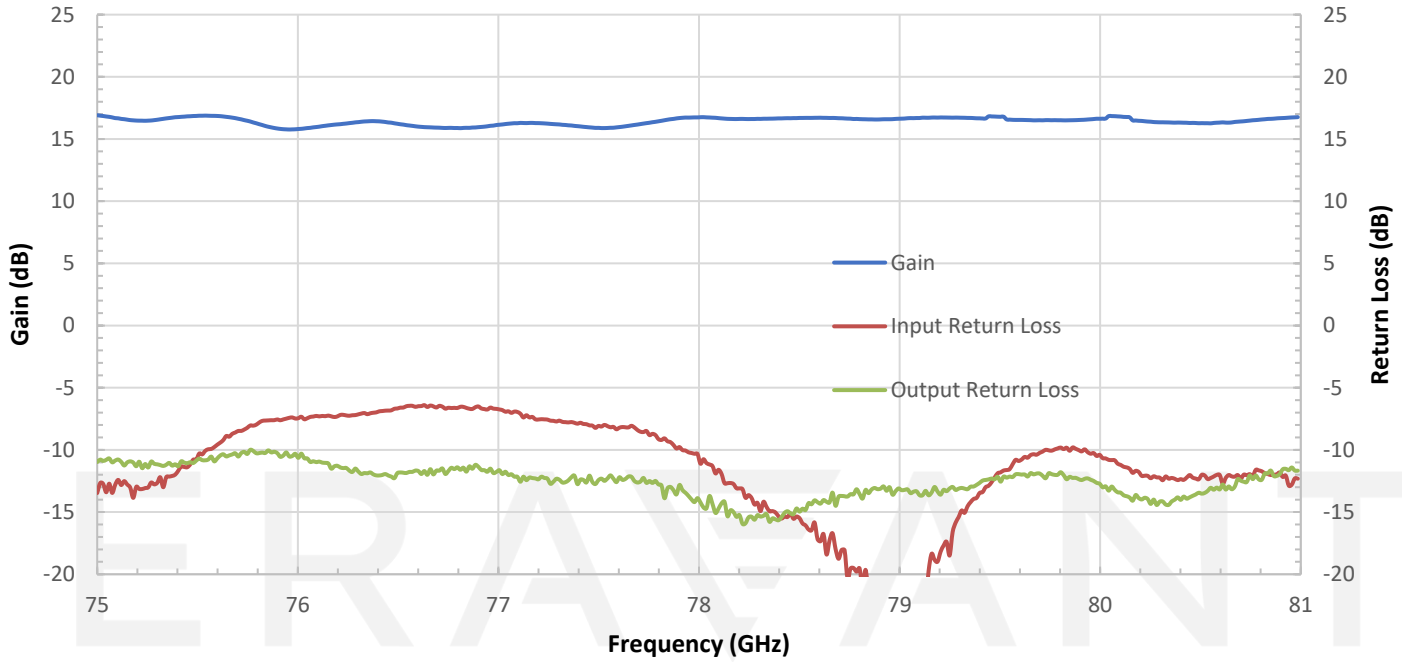
APPLICATIONS

- Communication Systems
- Test Equipment

SUPPLEMENTAL DETAILS

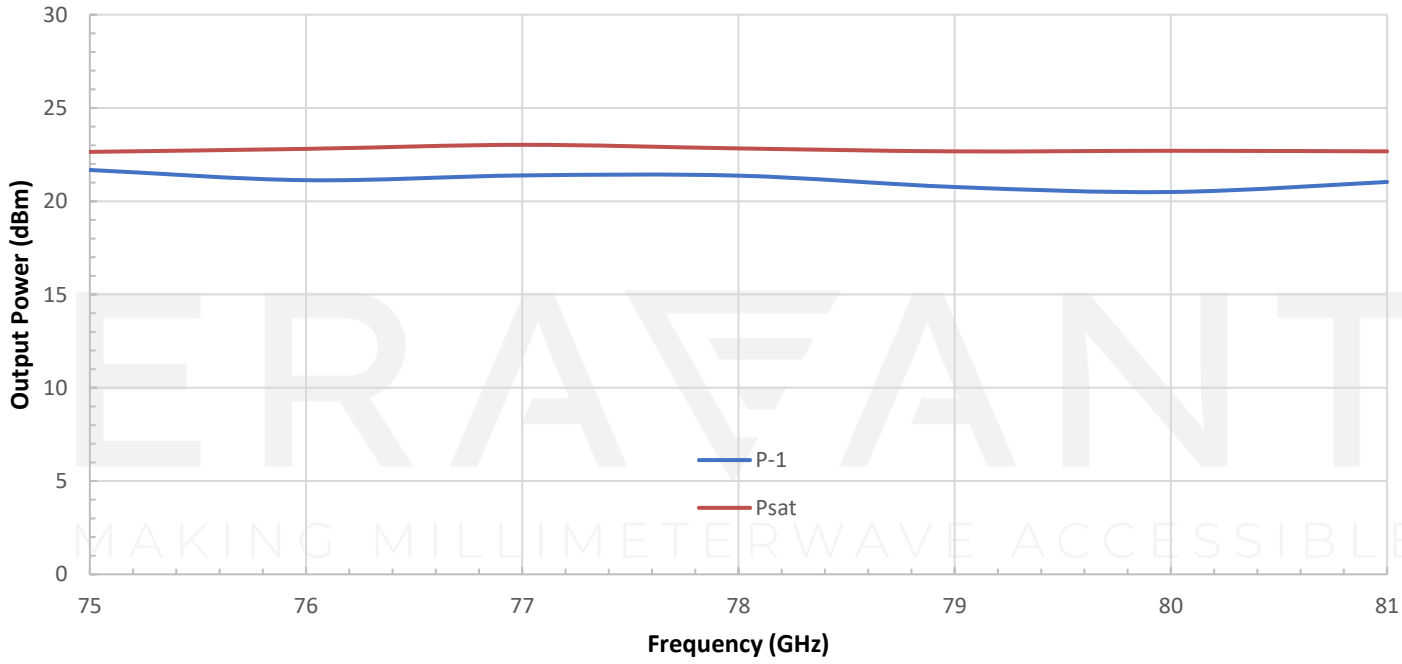
Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/762 mA

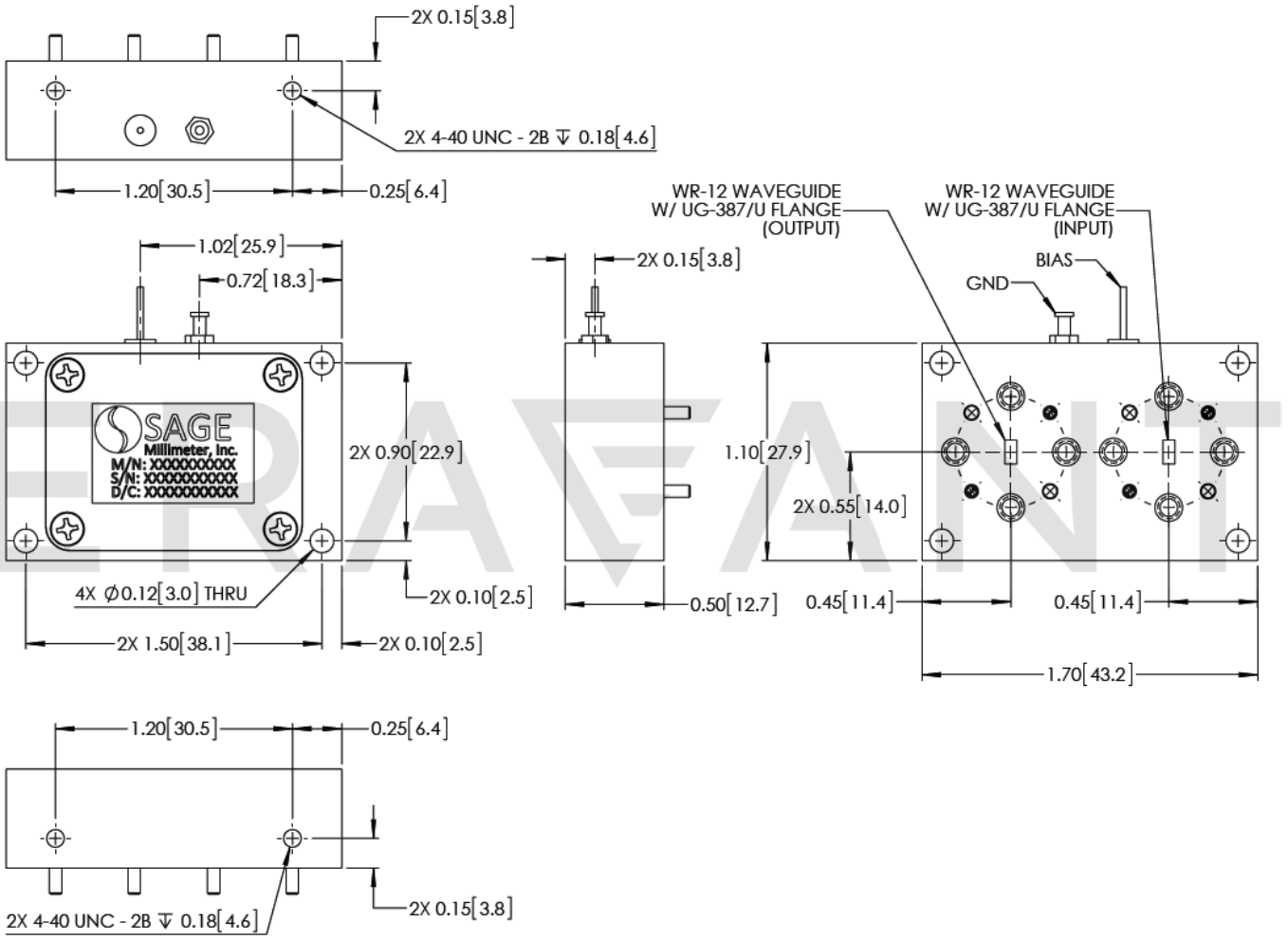


Output Power vs. Frequency

Bias: +8 V_{DC}/1500 mA sat



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.