

SBP-3735533527-1919-H1-HR

37 to 55 GHz, Power Amplifier, 35 dB Gain, +30 dBm P_{sat}

SBP-3735533527-1919-H1-HR is a power amplifier with a typical small signal gain of 35 dB and a nominal P_{sat} of +30 dBm across the frequency range of 37 to 55 GHz. The DC power requirement for the amplifier is +8 V_{DC}/ 6.0 A. The mechanical configuration offers an in-line structure with WR-19 Uni-Guide™. Other port configurations, such as 2.4 mm connectors and 1.85 mm connectors for either the input or output port, are also available under different model numbers. A heat sink is included for cooling.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	37 GHz		55 GHz
Small Signal Gain		35 dB	
P _{1dB}		+27 dBm	
P _{Sat}		+30 dBm	
P _{In} (Damage)			+5 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+8 V _{DC}	+12 V _{DC}
DC Supply Current (Saturated)		6.0 A	
Fan DC Voltage		+12 V _{DC}	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
Input/Output Ports	WR-19 Uni-Guide™ Waveguides with UG-383/U-M Anti-Cocking Flanges
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated, Black Anodize
Fan Connector	2 wire leads
Degree of Protection	IP40
Outline	BP-SU-2-SR-H95

ECCN

3A001.b.4

FEATURES

- Forced Air Cooling
- In-line Port Configuration
- High Output Power

APPLICATIONS

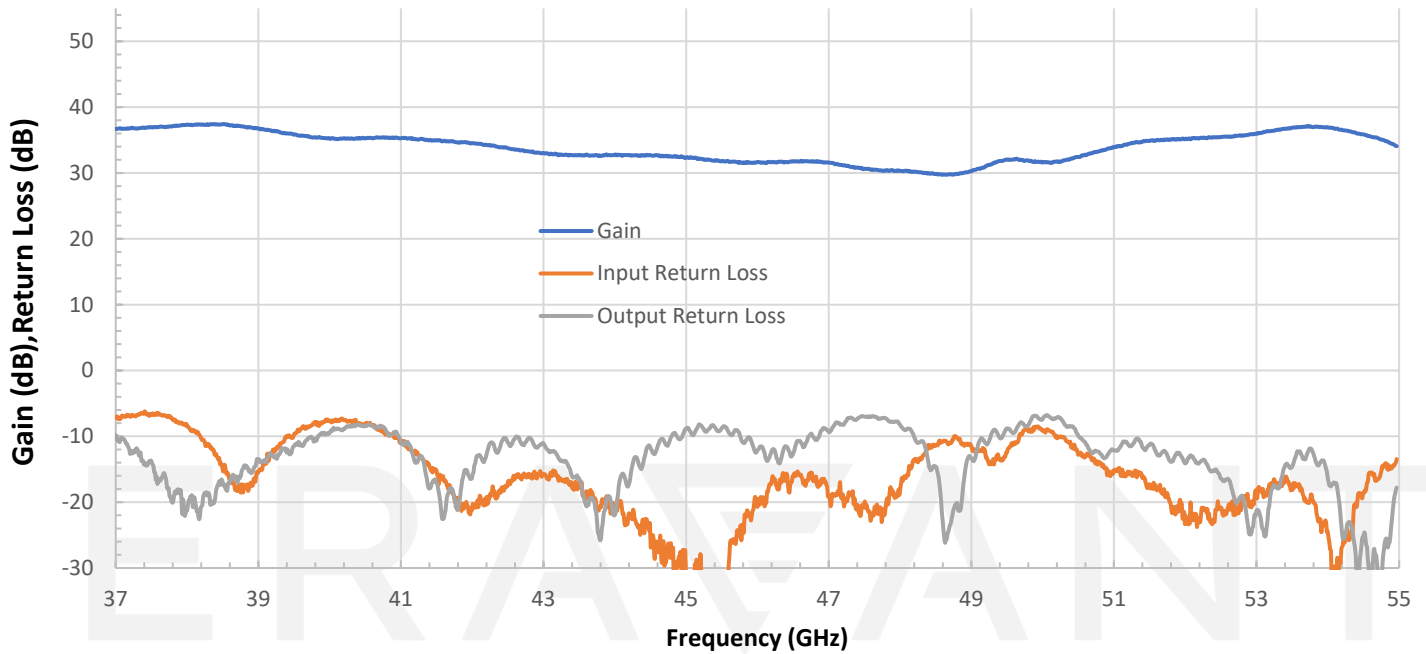
- Communications Systems
- Test Equipment
- Radar Systems
- SATCOM

SUPPLEMENTAL DETAILS

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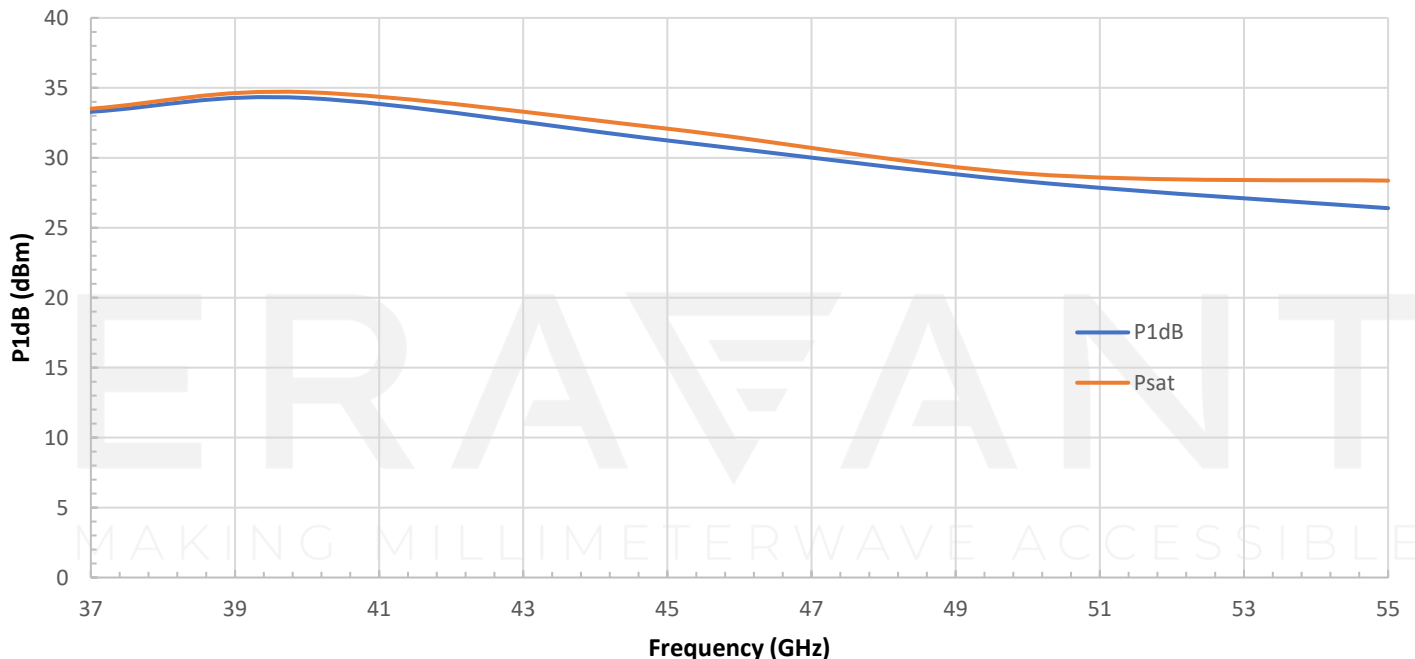
Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/3240mA



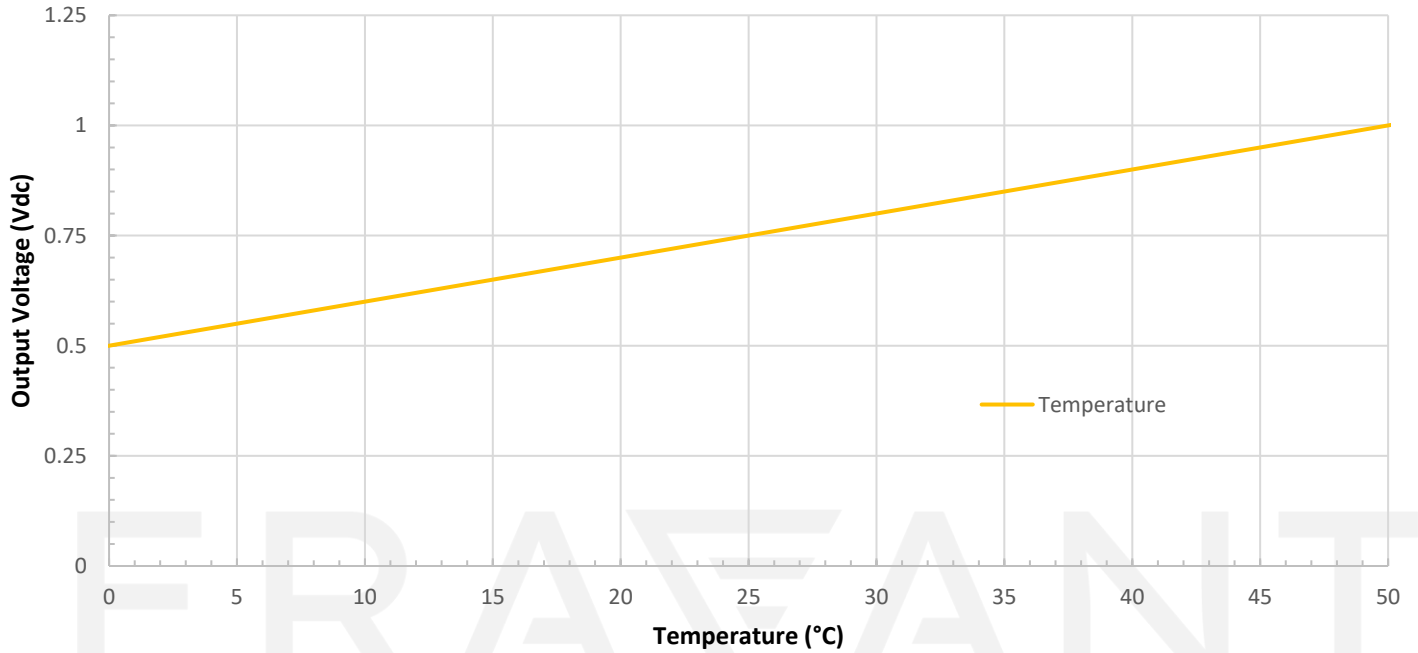
P1dB vs. Frequency

Bias: +8V_{DC}/6A

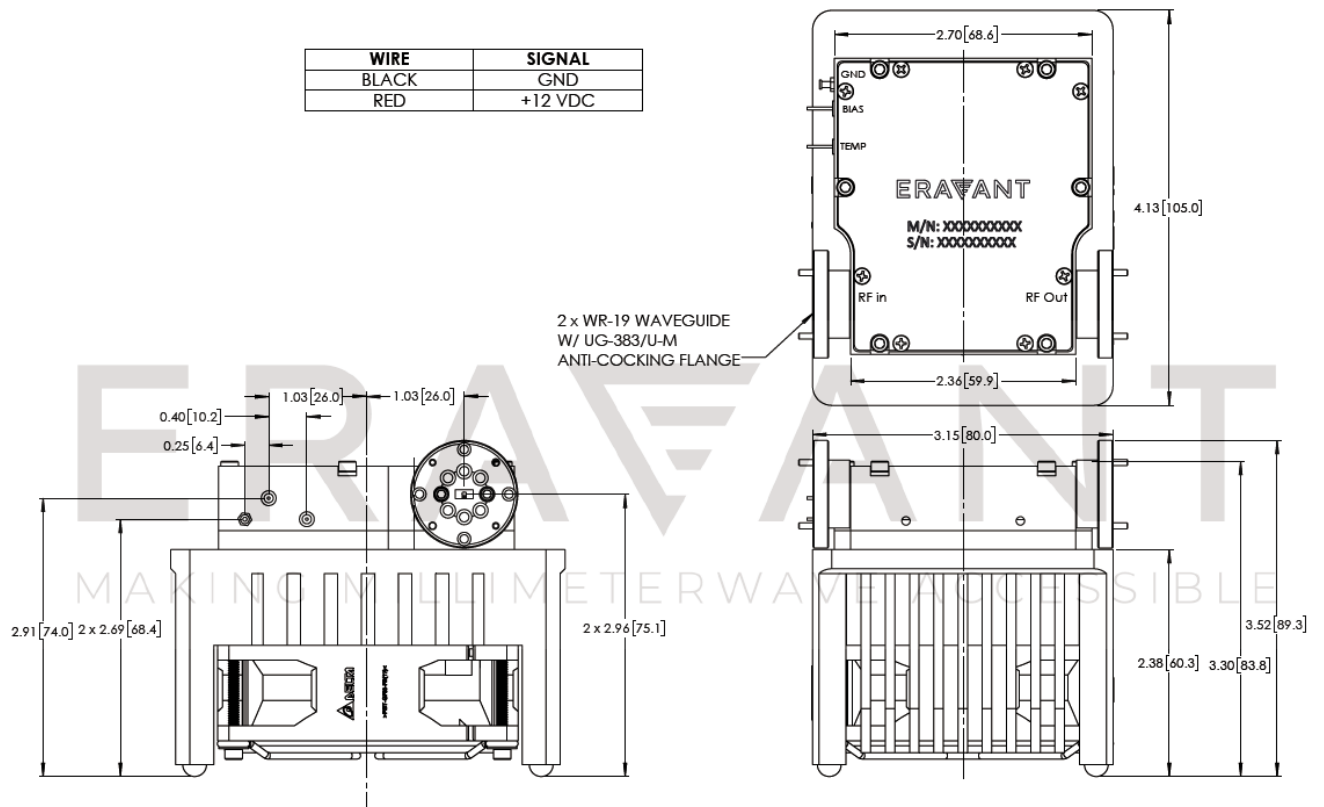


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Temperature vs Temp Sensor Output Voltage



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.
- Other mechanical configurations with other frequency bands are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

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.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

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