SBP-8839631225-1010-C1-HR

88 to 96 GHz, Power Amplifier, 12 dB Gain, +25 dBm P1dB

SBP-8839631225-1010-C1-HR is a W-Band, power amplifier with a typical small signal gain of 12 dB and a nominal P_{1dB} of +25 dBm across the frequency range of 88 to 96 GHz. The saturated output power of the amplifier is +32 dBm. The DC power requirement for the amplifier is +15 V_{DC}/ 1.1A. The mechanical configuration offers an in-line structure with WR-10 waveguides and UG-387/U-M anti-cocking flanges. A heat sink is included for cooling.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	88 GHz		96 GHz
Gain		12 dB	
P_{1dB}		+25 dBm	
P_{Sat}		+32 dBm	
P_{in}			+24 dBm
Input Return Loss		8 dB	
Output Return Loss		8 dB	
DC Voltage		+15 V_{DC}	
DC Supply Current (Quiescent):		0.7 A	
DC Supply Current (Saturated):		1.1 A	
Fan DC Voltage		+12 V_{DC}	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+75°C

Mechanical Specifications:

Item	Specification
Input/ Output Ports	WR-10 Rectangular Waveguide with UG-387/U-M Anti-Cocking Flange
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated, Black Anodize
Fan Connector	Molex 5051-03
Degree of Protection	IP40
Weight	18 oz
Size	3.15” (L) X 3.15” (W) X 3.73” (H)
Outline	BP-SW-2-H95-A

ECCN

3A001.b.4

FEATURES

- Forced Air Cooling
- In-line Port Configuration

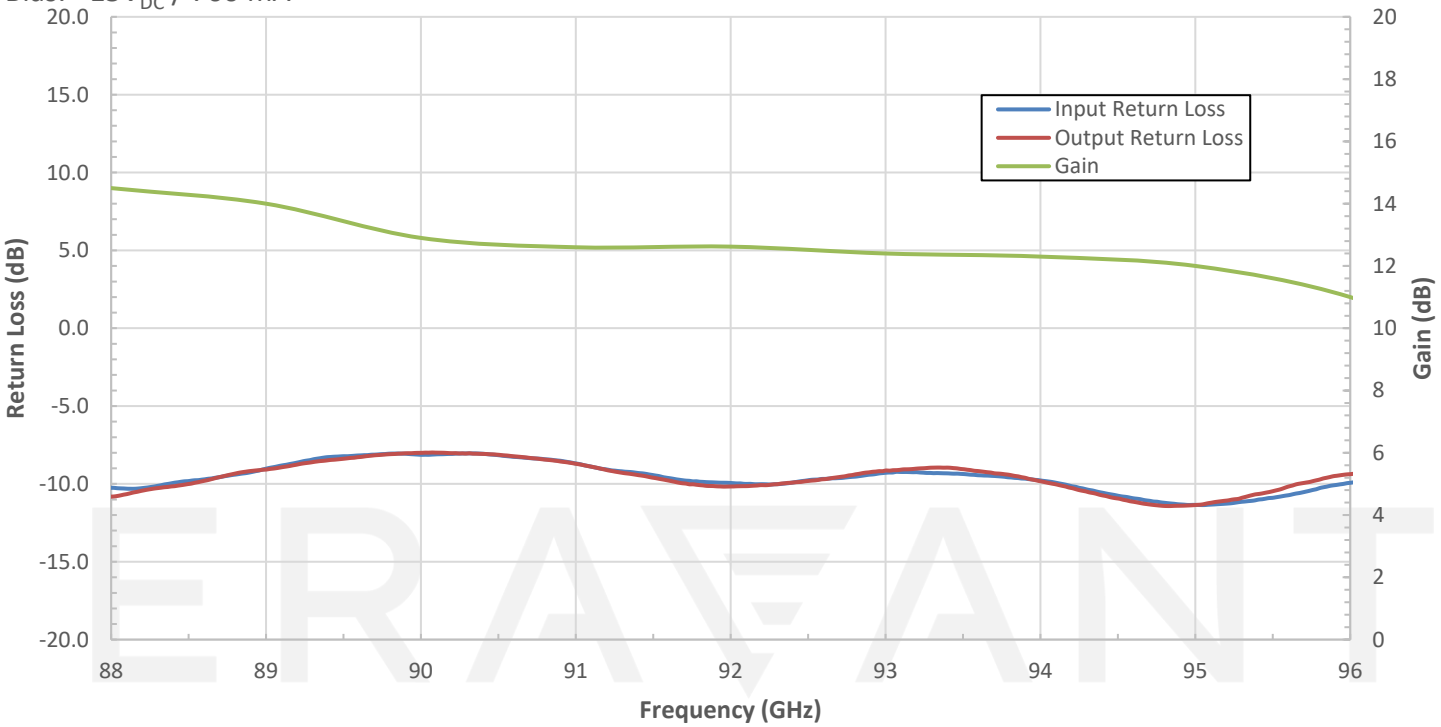
APPLICATIONS

- Communications Systems
- Test Equipment
- Radar Systems

SUPPLEMENTAL DETAILS

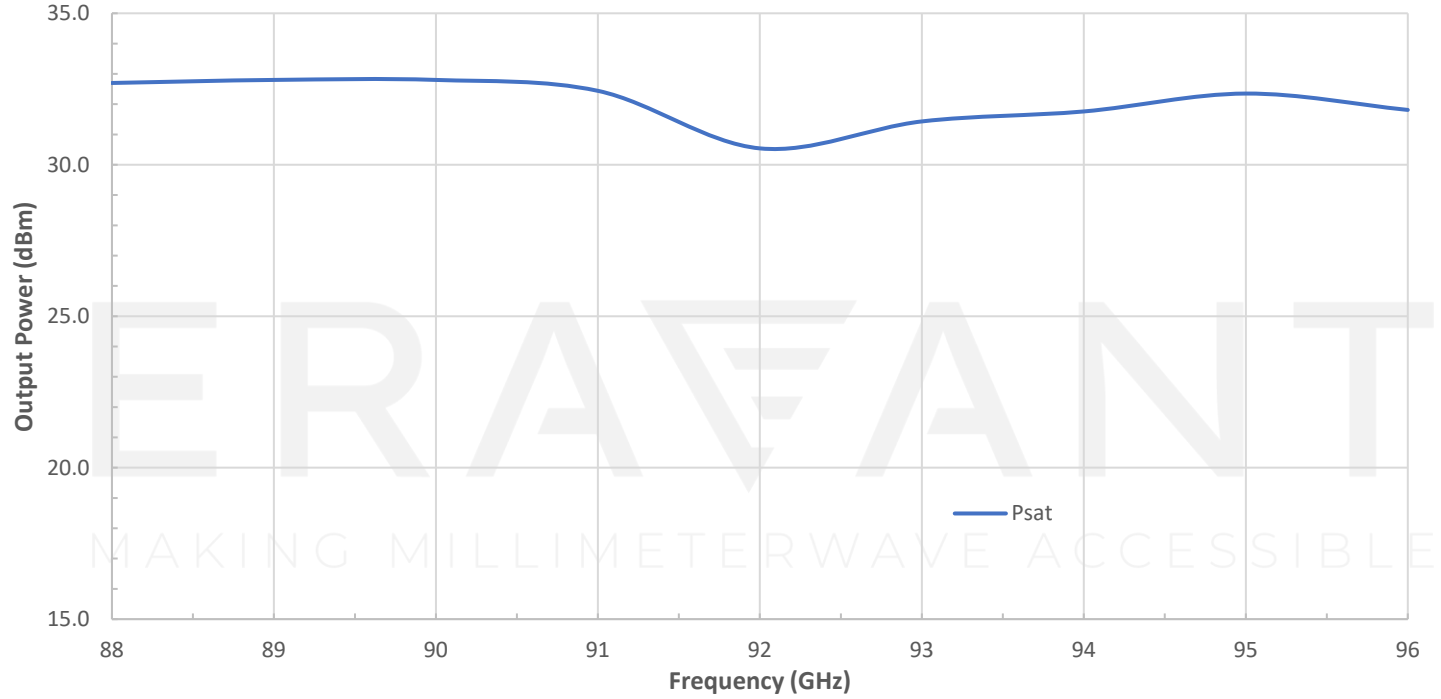
Typical Return Loss and Gain vs. Frequency

Bias: +15V_{DC} / 700 mA



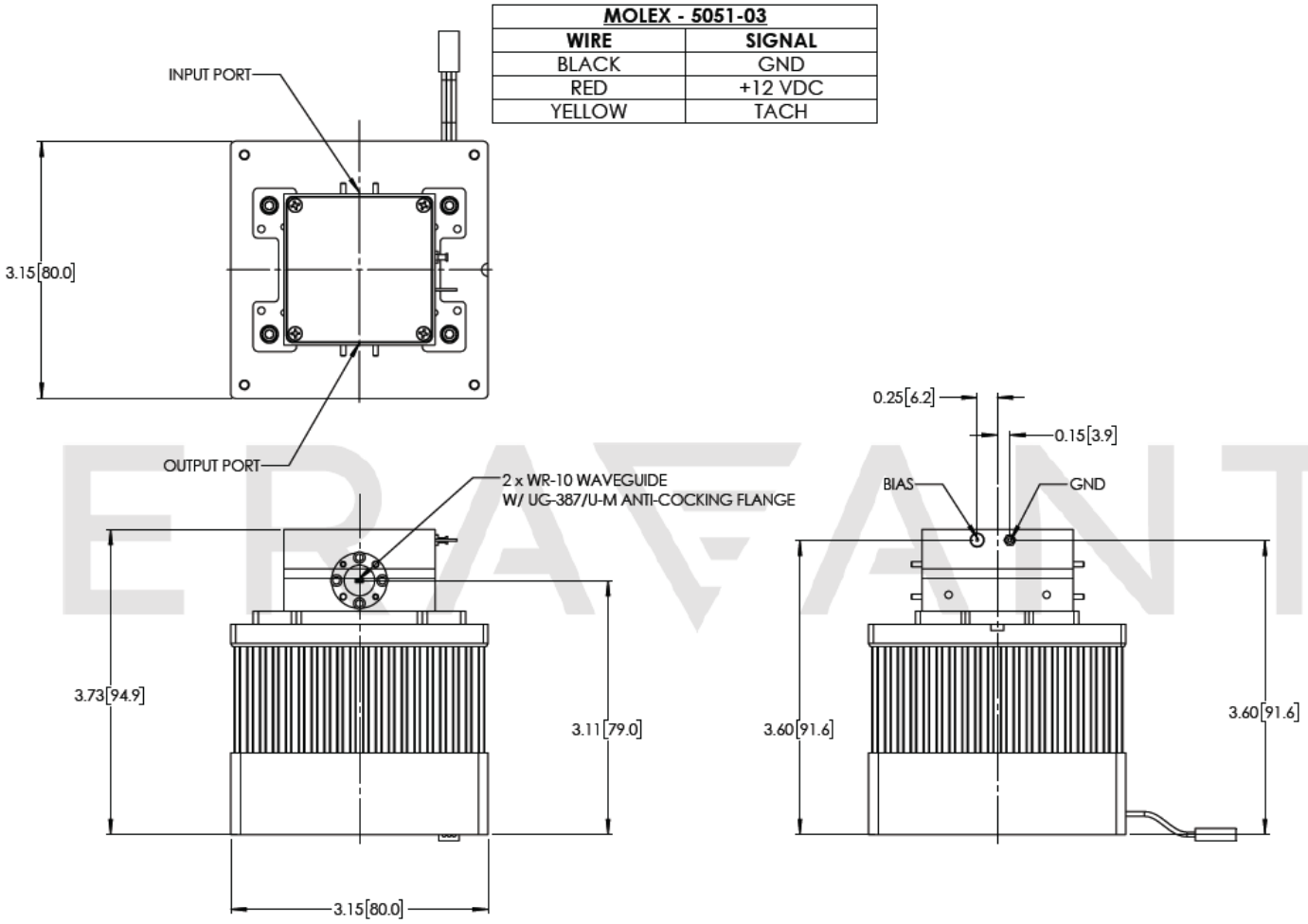
Typical Output Power vs. Frequency

Bias: +15V_{DC} / 1100 mA



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