

SBP-8839632035-1010-C1-HR

88 to 96 GHz, Power Amplifier, 20 dB Gain, +35 dBm P_{Sat}

SBP-8839632035-1010-C1-HR is a W-Band, power amplifier with a typical small signal gain of 20 dB and a nominal P_{Sat} of +35 dBm across the frequency range of 88 to 96 GHz. The saturated output power of the amplifier is +35 dBm. The DC power requirement for the amplifier is +15 V_{DC}/ 5.5 A. The mechanical configuration offers an in-line structure with WR-10 waveguides and UG-387/U-M anti-cocking flanges. The amplifier is mounted on a heatsink with fan that operates on +12 V_{DC} supply.



Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency Range		88 GHz		96 GHz
Small Signal Gain			20 dB	
P _{-1dB}	88-90 GHz		+30 dBm	
	90-94 GHz		+30 dBm	
	94-96 GHz		+27 dBm	
P _{Sat}	88-90 GHz		+35 dBm	
	90-94 GHz		+35 dBm	
	94-96 GHz		+33 dBm	
P _{in}				+24 dBm
Input Return Loss			8 dB	
Output Return Loss			8 dB	
DC Voltage			+15 V _{DC}	
DC Supply Current (Quiescent):			3.2 A	
DC Supply Current (Saturated):			5.5 A	
Fan DC Voltage			+12 V _{DC}	
Specification Temperature			+25°C	
Operating Temperature		0°C		+70°C

ECCN

3A001.b.4

FEATURES

- 3 W CW Output Power
- In-line Port Configuration
- Forced Air Cooling

APPLICATIONS

- Communications Systems
- Test Equipment
- Radar Systems

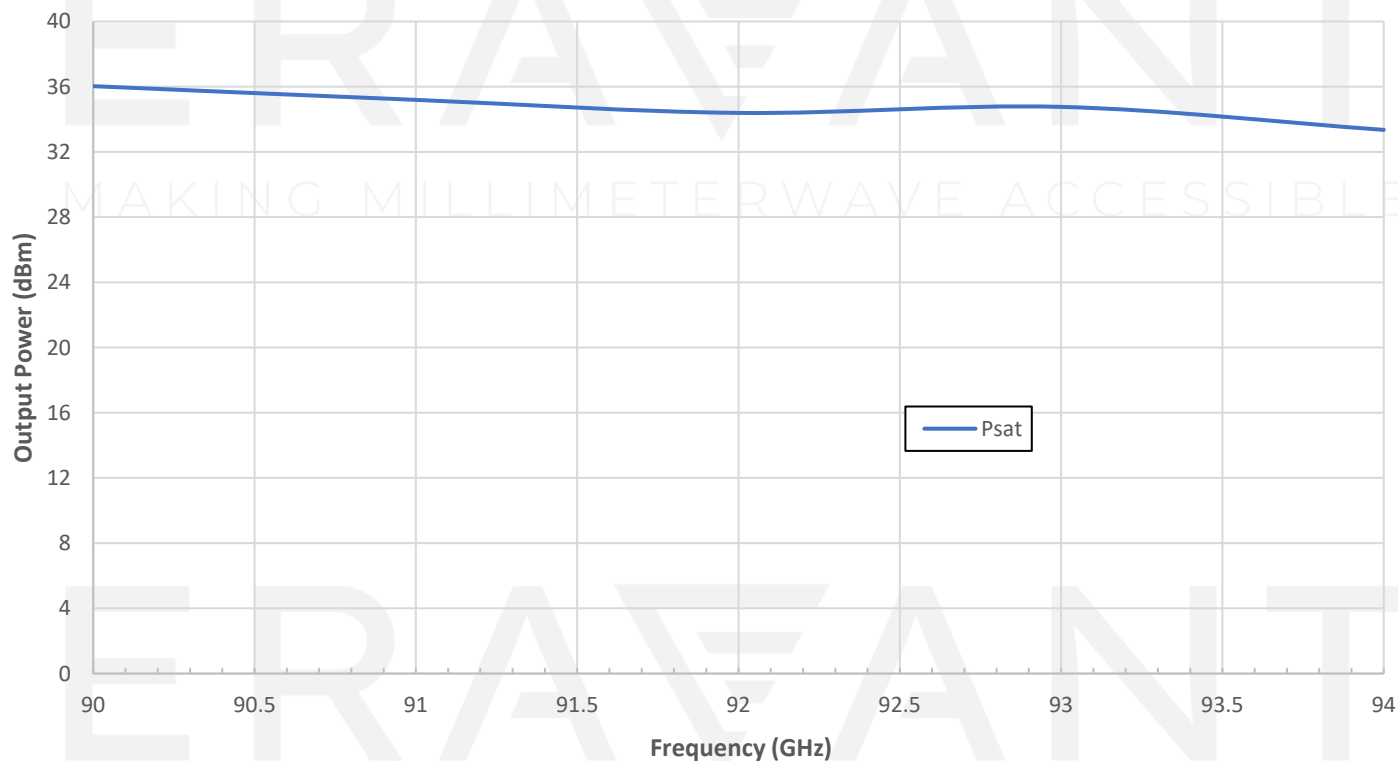
SUPPLEMENTAL DETAILS

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 Anodized
Fan Connector	Molex 5051-03
Degree of Protection	IP40
Weight	5 lbs
Size	6.20" (L) X 7.40" (W) X 3.73" (H)
Outline	BP-SW-2-H95-WP4-A

Typical Output Power vs. Frequency

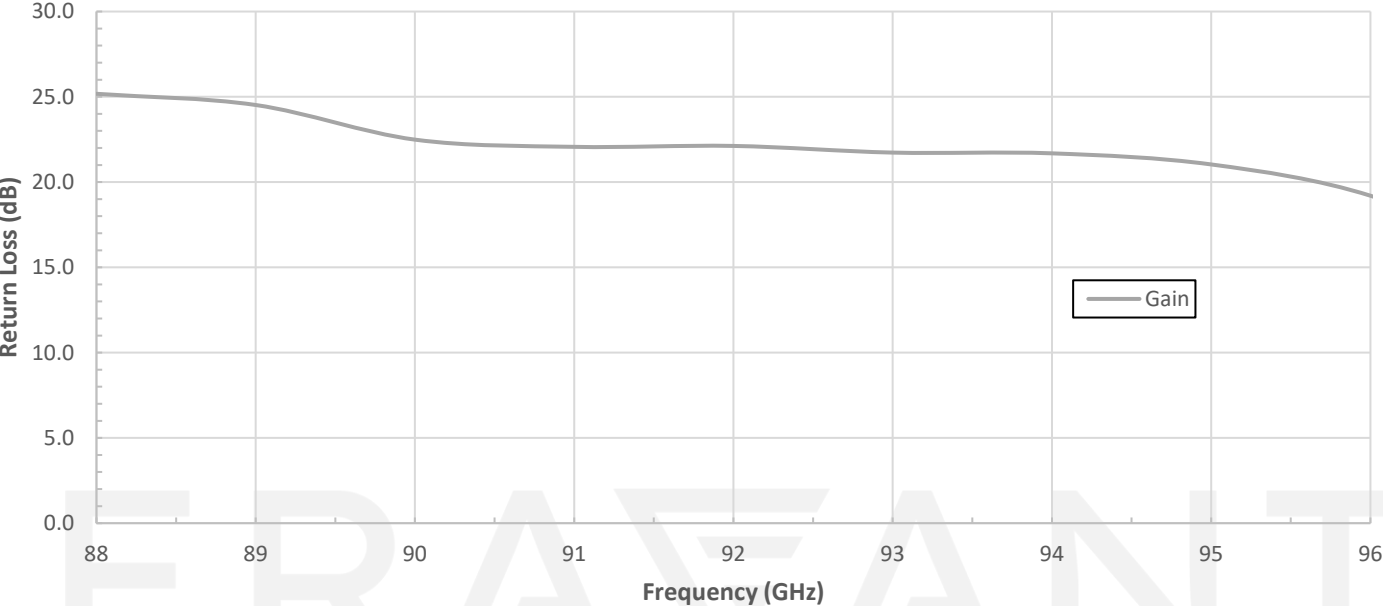
Bias: +15V_{DC} / 5.5A



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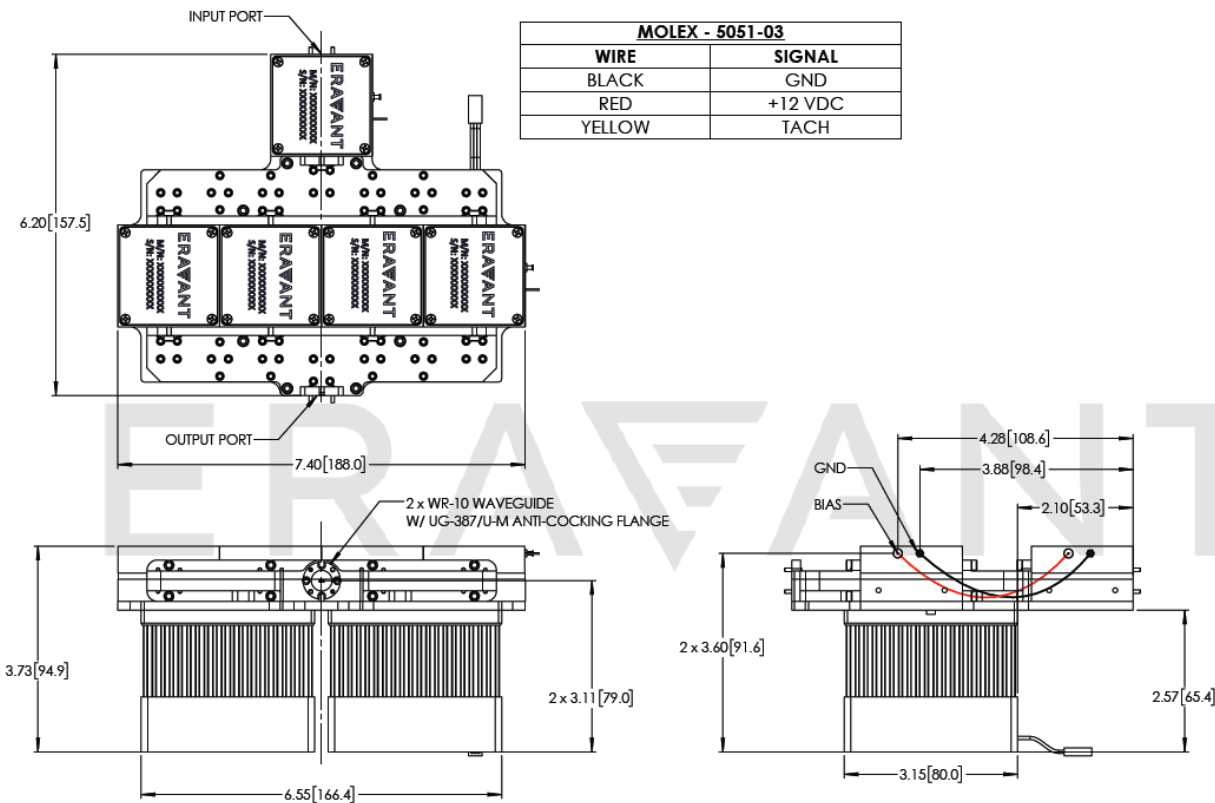
Typical Gain vs. Frequency

Bias: +15V_{DC} / 3.2A



Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters]



NOTE:

- The datasheet product photo used is not representative of the final product.
- 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 +75°C.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

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