SBP-9039832832-1010-E1

90 to 98 GHz, Power Amplifier, 28 dB Gain, +32 dBm P_{sat}

SBP-9039832832-1010-E1 is a W-Band, power amplifier with a typical small signal gain of 28 dB and a nominal P_{sat} of +32 dBm across the frequency range of 90 to 98 GHz. The DC power requirement for the amplifier is +18 V_{DC}/ 1.8A. The mechanical configuration offers an in-line structure with WR-10 waveguides and UG-387/U-M anti-cocking flanges.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	90 GHz		98 GHz
Gain		28 dB	
P_{1dB}		+24 dBm	
P_{Sat}		+32 dBm	
P_{in}			+20 dBm
Input Return Loss		6 dB	
Output Return Loss		6 dB	
DC Voltage		+18 V_{DC}	+19 V_{DC}
DC Supply Current (Quiescent)		800 mA	
DC Supply Current (Saturated)		1.8 A	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°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
Degree of Protection	IP40
Weight	18 oz
Size	1.50” (L) X 1.10” (W) X 0.75” (H)
Outline	BG-SW-2-A

ECCN

3A001.b.4

FEATURES

- High Output Power
- In-line Port Configuration

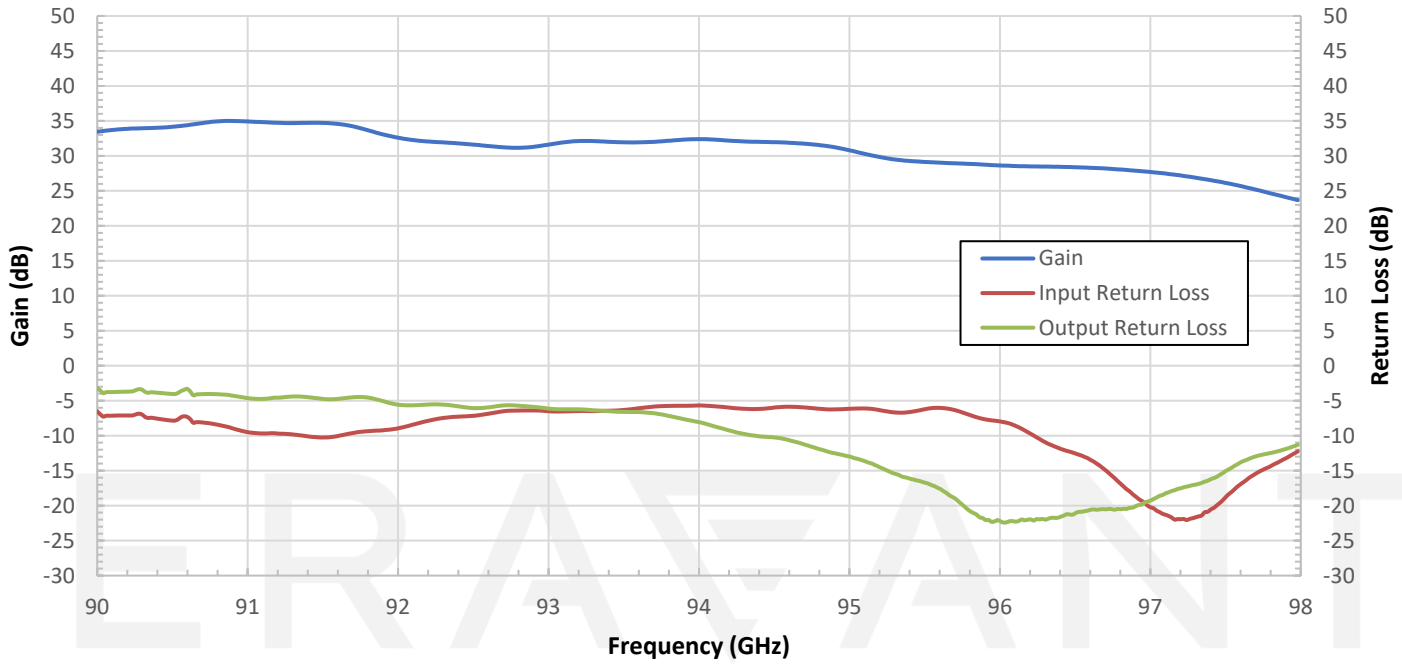
APPLICATIONS

- Communications Systems
- Test Equipment
- Radar Systems

SUPPLEMENTAL DETAILS

Gain and Return Loss vs. Frequency

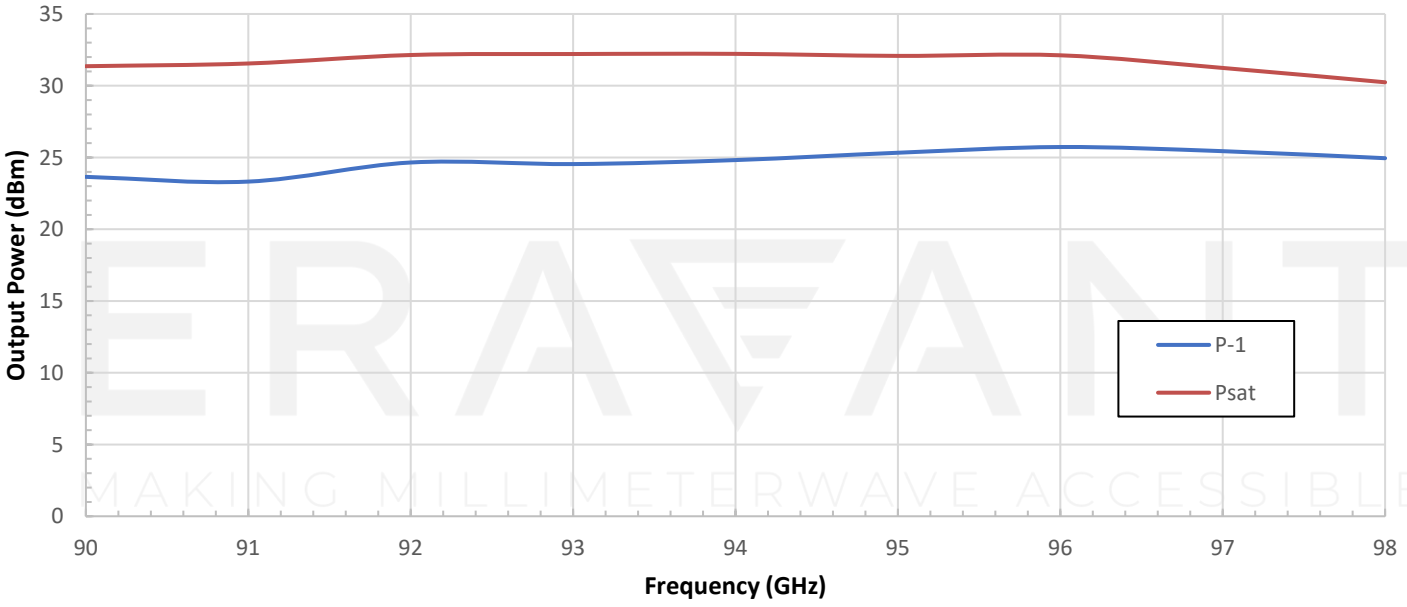
Bias: +18 V_{DC}/809 mA



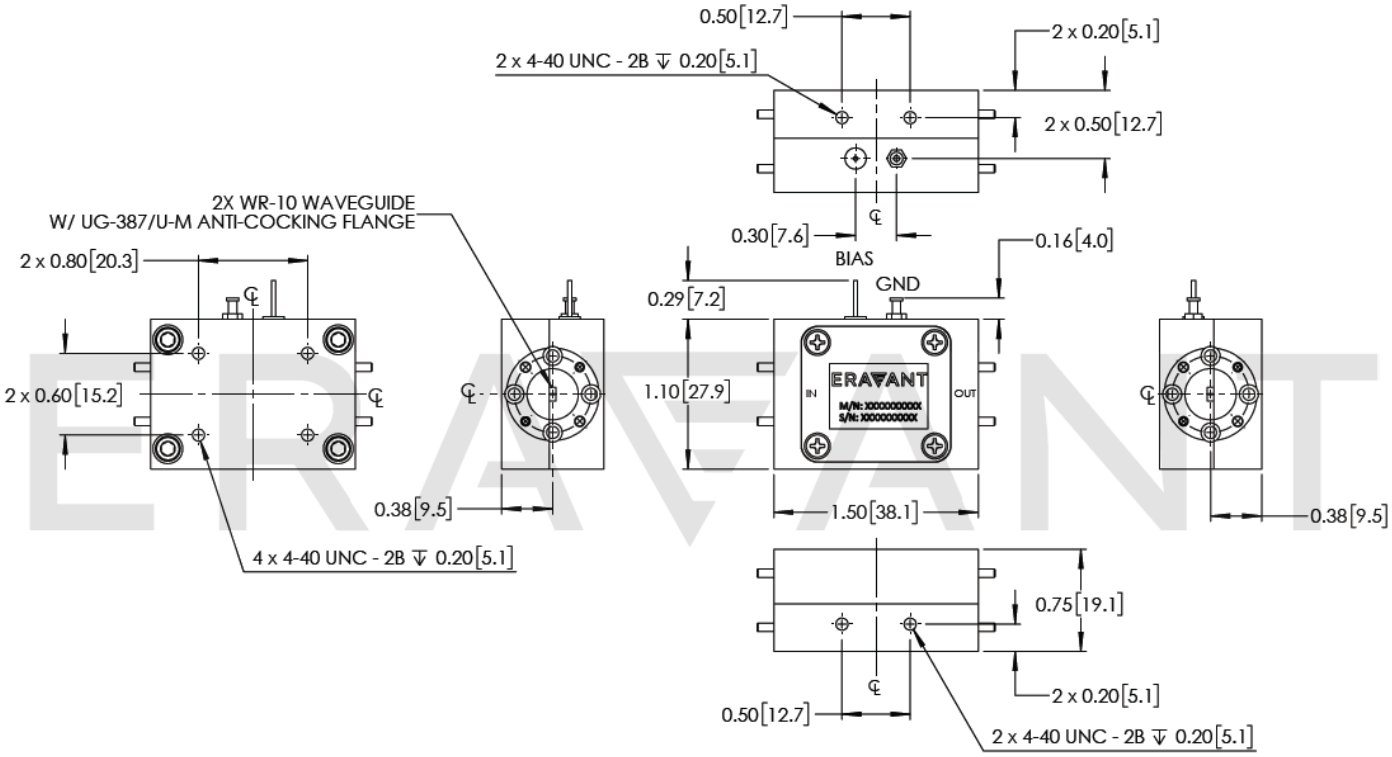
Output Power vs. Frequency

Bias: +18 V_{DC}/809mA

RF Saturated: +18V_{DC}/ 1,700mA



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.
- All testing was performed under +25 ˚C case temperature.
- 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.