SBP-8138633233-1212-EP

81 to 86 GHz, Power Amplifier, 32 dB Gain, +33 dBm P_{sat}

SBP-8138633233-1212-EP is a E-Band, GaAs power amplifier with a typical small signal gain of 32 dB and a nominal P_{sat} of +33 dBm across the frequency range of 81 to 86 GHz. The DC power requirement for the amplifier is +6 V_{DC}/ 8.5 A. The mechanical configuration offers an in-line structure with WR-12 waveguides and UG-387/U-M anti-cocking flanges. A heat sink is included for cooling.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	81 GHz		86 GHz
Small Signal Gain		32 dB	
P_{1dB}		+31 dBm	
P_{Sat}		+33 dBm	
Input Return Loss		8 dB	
Output Return Loss		8 dB	
DC Voltage		+6 V_{DC}	
DC Supply Current (Saturated)		8.5 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-12 Rectangular Waveguide with UG-387/U-M Anti-Cocking Flange
Bias/TTL	Solder Pin
Case Material	Aluminum
Finish	Gold Plated, Black Anodize
Weight	16 oz
Size	4.33” (L) X 3.35” (W) X 3.46” (H)
Outline	BP-HE-A-H2

ECCN

3A001.b.4

FEATURES

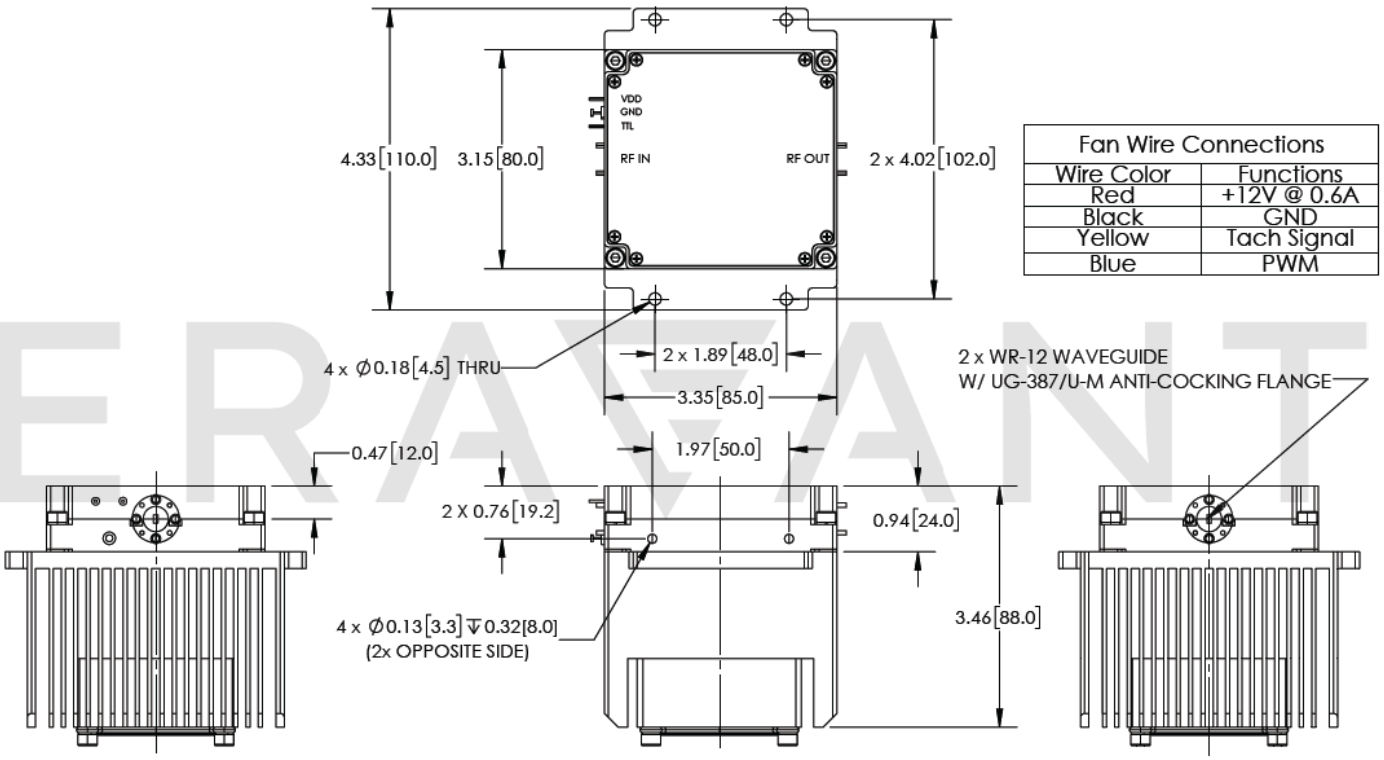
- Forced Air Cooling
- In-line Port Configuration
- High Power Output
- High Linearity

APPLICATIONS

- Communications Systems
- Test Equipment
- Radar Systems

SUPPLEMENTAL DETAILS

Mechanical Outline: Unless otherwise specified, all dimensions are in inches [millimeters])



Fan Wire Connections	
Wire Color	Functions
Red	+12V @ 0.6A
Black	GND
Yellow	Tach Signal
Blue	PWM

NOTE:

- **The product picture does not represent 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 **+50°C**.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.