SBP-7137633633-1212-EP

E-Band Power Amplifier, 71 to 76 GHz, 36 dB Gain, +33 dBm P_{sat}

SBP-7137633633-1212-EP is a E-Band, GaAs power amplifier with a typical small signal gain of 36 dB and a nominal P_{sat} of +33 dBm across the frequency range of 71 to 76 GHz. The DC power requirement for the amplifier is +6 V_{DC}/6 A. The mechanical configurations is an inline structure with WR-12 waveguides and UG-387/U anti-cocking flanges. Power amplifier module comes with heatsink and fan asssembled with the unit.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	71 GHz		76 GHz
Small Signal Gain		36 dB	
P_{1dB}		+31 dBm	
P_{sat}		+33 dBm	
P_{in} @ P_{sat}		0 dBm	+5 dBm
Input Return Loss		8 dB	
Output Return Loss without Damage		5 dB	
DC Supply Voltage (VDD)	+5 V_{DC}	+6 V_{DC}	
DC Supply Current		6.0 A	
Supply Voltage to Fan		+12 V_{DC}/0.7 A	
Specification Temperature		+25 ˚C	
Operating Temperature	0˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
Input	WR-12 Waveguide with UG-387/U Anti-Coking Flange
Output	WR-12 Waveguide with UG-387/U Anti-Coking Flange
Power Supply	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Size	3.35” (L) X 4.33” (W) X 3.46” (H)
Outline	BP-HE-A-H2

ECCN

3A001.b.4

FEATURES

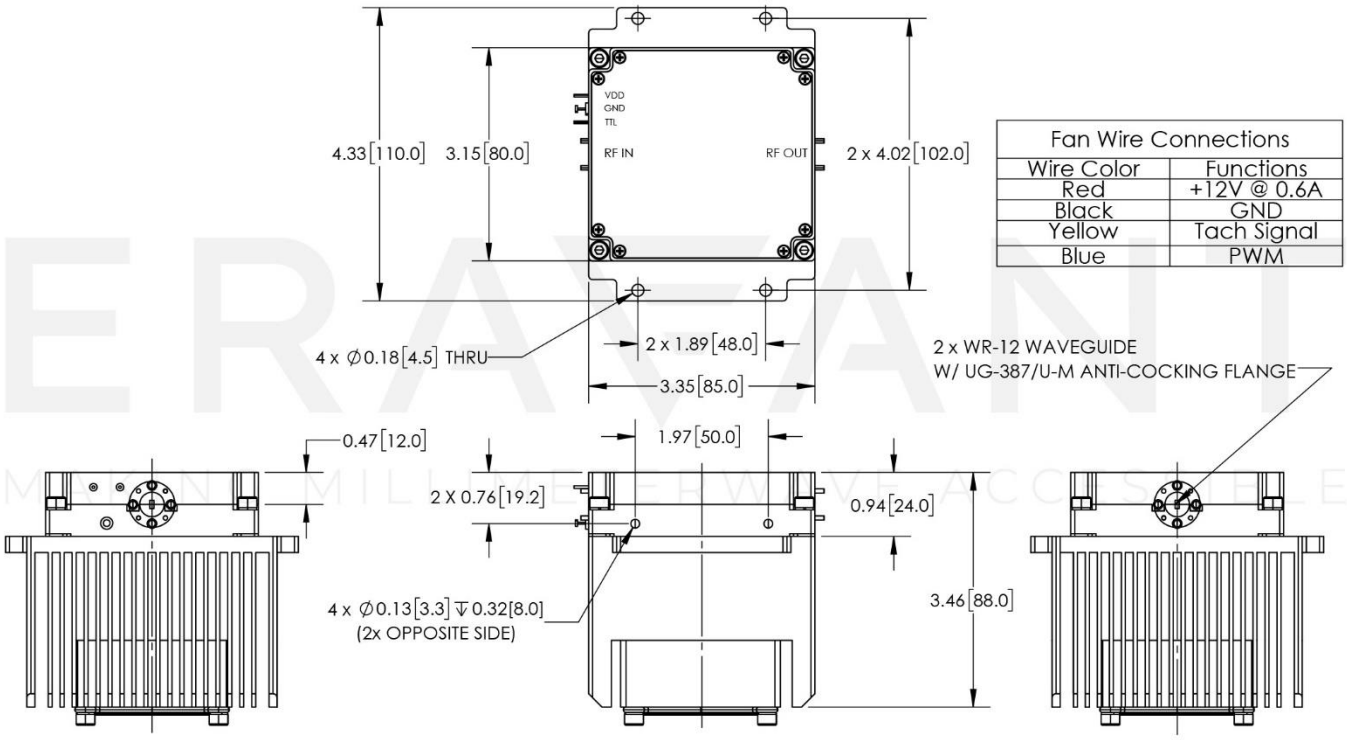
- Class AB GaAs Technique
- Broadband Performance
- High Gain
- High Output Power
- Forced Air Cooling
- In-line Port Configuration

APPLICATIONS

- Radar Systems
- Communication Systems
- Test Equipment

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.
- All testing was performed under +25 ˚C case temperature.
- Other mechanical configurations 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.
- Do not block the air inlets and outlets.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Do not plug or unplug any connectors when amplifier is activated. All connectors must be connected/disconnected when amplifier is off.
- The case temperature of the device shall never exceed +50 ˚C. Use proper heatsink or fan if necessary
- Any foreign objects in the waveguide will degrade performance and/or damage the device.