

## SBP-7137634034-1212-EP

### E-Band Power Amplifier, 71 to 76 GHz, 40 dB Gain, +34 dBm P<sub>sat</sub>

**SBP-7137634034-1212-EP** is a E-Band GaN power amplifier with a typical small signal gain of 40 dB and a nominal P<sub>sat</sub> of +34 dBm across the frequency range of 71 to 76 GHz. The DC power requirement for the amplifier is +28 V<sub>DC</sub>/1.4 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 assembled with the unit.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	71 GHz		76 GHz
Small Signal Gain		40 dB	
Power Gain		35 dB	
P <sub>sat</sub>		+34 dBm	
P <sub>in</sub>			+10 dBm
Input Return Loss		10 dB	
Output Return Loss		5 dB	
DC Supply Voltage (VDD)	+26 V <sub>DC</sub>	+28 V <sub>DC</sub>	+32 V <sub>DC</sub>
DC Supply Current		1.4 A	
Supply Voltage to Fan		+12 V <sub>DC</sub> /0.6 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	3.15" (L) X 2.99" (W) X 3.69" (H)
Outline	BP-HE-H1

#### ECCN

3A001.b.4

#### FEATURES

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

#### APPLICATIONS

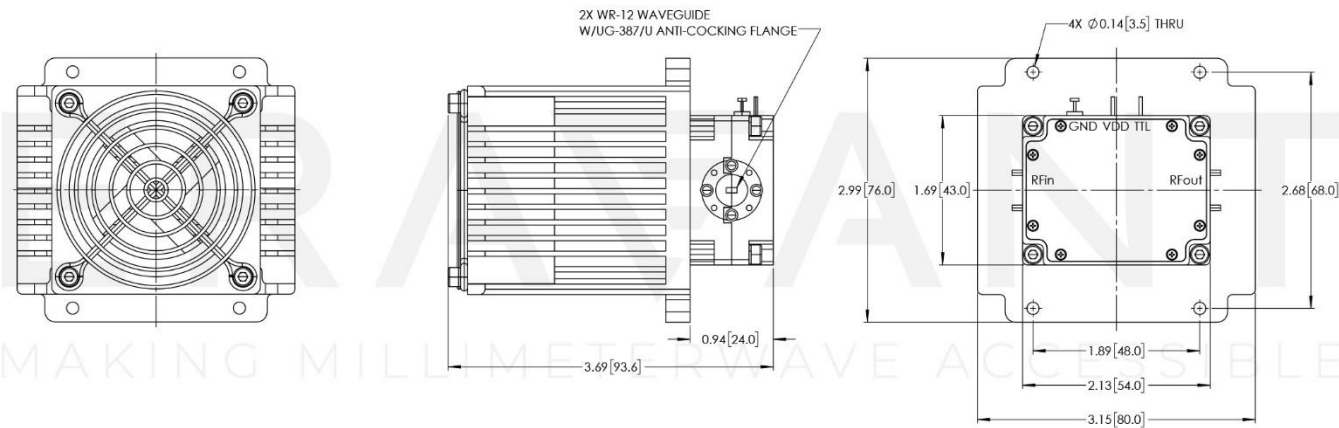
- Radar Systems
- Communication Systems
- Test Equipment

#### SUPPLEMENTAL DETAILS



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**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 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.