

50 to 63 GHz, Power Amplifier, 32 dB Gain, +36 dBm Psat

SBP-5036333236-VFVF-EP is a V-Band, GaN power amplifier with a typical small signal gain of 32 dB and a nominal P_{sat} of +36 dBm across the frequency range of 50 to 63 GHz. The DC power requirement for the amplifier is +18 V_{DC} / 3 A. The mechanical configuration offers an in-line structure with WR-15 waveguides and UG-385/U anti-cocking flanges. A heat sink is included for cooling.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	50 GHz		63 GHz
Small Signal Gain		32 dB	
P _{1dB}		+28 dBm	
P _{Sat}		+36 dBm	
Input Return Loss		15 dB	
Output Return Loss		14 dB	
DC Voltage		+18 V _{DC}	
DC Supply Current (Quiescent)		1.8 A	
DC Supply Current (Saturated)		3 A	
Fan DC Voltage		+12 V _{DC}	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification	
Input/Output Ports	1.85 mm Female	
Bias	Solder Pin	
Case Material	Copper	
Finish	Gold Plated, Black Anodize	
Outline	BP-HC-H4	

ECCN

3A001.b.4

FEATURES

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

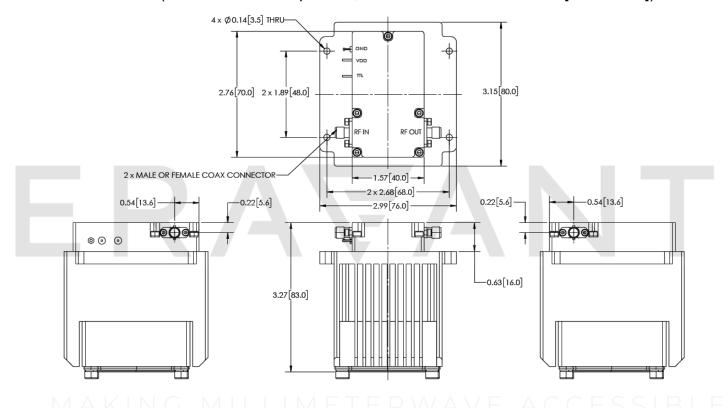
APPLICATIONS

- Communications Systems
- Test Equipment
- Radar Systems

SUPPLEMENTAL DETAILS



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.
- 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 <u>+70°C</u>.
- · Any foreign objects in the waveguide will cause performance degradation and possible device damage.

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