SBP-5036333236-1515-E1-HR

50 to 63 GHz, Power Amplifier, 32 dB Gain, +36 dBm P_{sat}

SBP-5036333236-1515-E1-HR 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	WR-15 Rectangular Waveguide with UG-385/U Anti-Cocking Flange
Bias	Solder Pin
Case Material	Copper
Finish	Gold Plated, Black Anodize
Fan Connector	Molex 5051-03
Degree of Protection	IP40
Outline	BP-SV-2-BR-H95-A

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: TBD

NOTE:

- **The product presented in this datasheet is at a preliminary design stage**. Final electrical and mechanical specifications may differ than what is presented.
- 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 +70°C.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

ERAVANT
MAKING MILLIMETERWAVE ACCESSIBLE