

SBP-7138632433-1212-C1-HR

71 to 86 GHz, Power Amplifier, 24 dB Gain, +33 dBm P_{sat}

SBP-7138632433-1212-C1-HR is a E-Band, GaAs power amplifier with a typical small signal gain of 24 dB and a nominal P_{sat} of +33 dBm across the frequency range of 71 to 86 GHz. The DC power requirement for the amplifier is +6 V_{DC}/ 8 A. The mechanical configuration offers an in-line structure with WR-12 waveguides and UG-387 anti-cocking flanges. A heat sink is included for cooling. Model SBP-5539531012-1212-E1 may be used as a driver power amplifier.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	71 GHz		86 GHz
Small Signal Gain		24 dB	
P_{1dB}		+31 dBm	
P_{Sat}		+33 dBm	
Input Return Loss		10 dB	
Output Return Loss		12 dB	
DC Voltage		+6 V _{DC}	
DC Supply Current (Quiescent)		6.0 A	
DC Supply Current (Saturated)		8.0 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 Anti-Cocking Flange
Bias	Solder Pin
Case Material	Copper
Finish	Gold Plated, Black Anodize
Fan Connector	Molex 5051-03
Degree of Protection	IP40
Weight	25 oz
Size	3.15" (L) X 3.15" (W) X 3.73" (H)
Outline	BP-SE-2-H95-A

ECCN

3A001.b.4

FEATURES

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

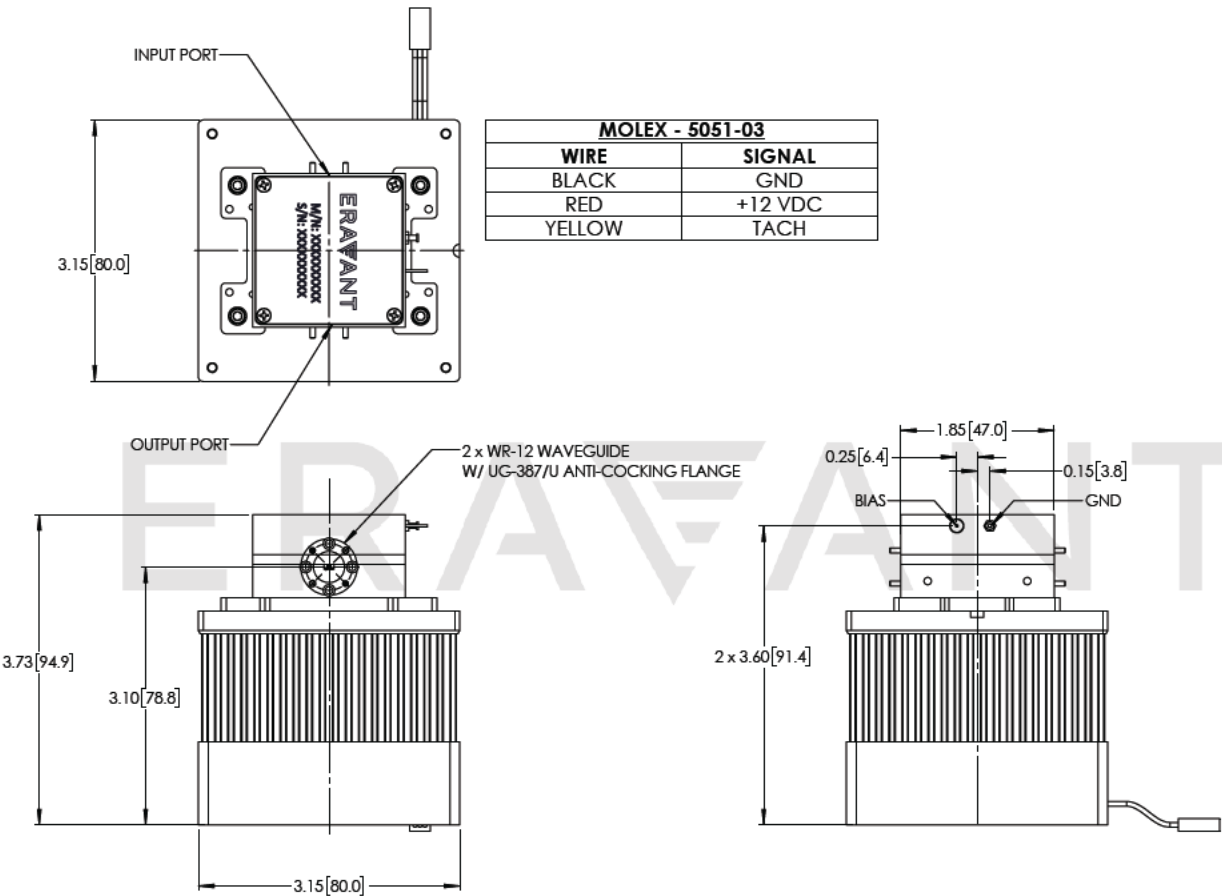
APPLICATIONS

- Communications Systems
- Test Equipment
- Radar Systems

SUPPLEMENTAL DETAILS

SBP-7138632433-1212-C1-HR

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



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.