

SBP-9231043629-1010-E1

W-Band Power Amplifier, 92 to 100 GHz, 36 dB Gain, 29 dBm P_{1dB}

SBP-9231043629-1010-E1 is a GaAs based high power amplifier with a typical small signal gain of 36 dB and a nominal P_{1dB} of +29 dBm across the frequency range of 92 to 100 GHz. The DC power requirement for the amplifier is +8 V_{DC}/8 A. The mechanical configuration offers an in line structure with WR-10 waveguides and UG-387/U-M anti-cocking flanges. Other port configurations, such as with 1 mm connectors or a right angle structure with WR-10 waveguides, are also available under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	92 GHz		100 GHz
Gain		36 dB	
P _{1dB}		+29 dBm	
P _{sat}		+31 dBm	
P _{In}			+15 dBm
Input Return Loss		8 dB	
Output Return Loss		10 dB	
DC Voltage	+6 V _{DC}	+8 V _{DC}	+12 V _{DC}
DC Supply Current		8 A	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
Ports	WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	26 Oz
Size	4.95" (W) X 4.60" (L) X 3.63" (H)
Outline	BP-SW-A-4

ECCN

3A001.b.4

FEATURES

- High Power Output

APPLICATIONS

- Test Instrumentations
- Communication Systems
- Radar Systems

SUPPLEMENTAL DETAILS



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- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

- 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 +50 °C. Use proper heatsink or fan if necessary.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended