



34 to 37 GHz Power Amplifier, 50 dB Gain, +38 dBm P_{1dB}

Description:

Model SBP-3433735038-KFKF-E3 is a power amplifier with a typical small signal gain of 50 dB and a nominal P_{1dB} of +38 dBm across the frequency range of 34 to 37 GHz. The DC power requirement for the amplifier is +12 V_{DC}/10 A. The RF connectors are female K connectors. Other port configurations, such as male K connectors for either the input or output port, are also available under different model numbers.



Features:

- Broadband Performance
- High Gain
- High Output Power

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	34 GHz		37 GHz
Gain		50 dB	
P _{1dB}		+38 dBm	
P _{sat}		+40 dBm	
Damage P _{in}			+5 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+12 V _{DC}	
DC Supply Current		10 A	15 A
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Parameter	Connector
Input	K(F)
Output	K(F)
DC Bias	D-Sub 9 (M) Connector
Case Material	Aluminum
Finish	Chem Film
Weight	13 Oz
Size	6.97" (W) X 7.09" (L) X 1.34" (H)
Outline	BP-ZC-3

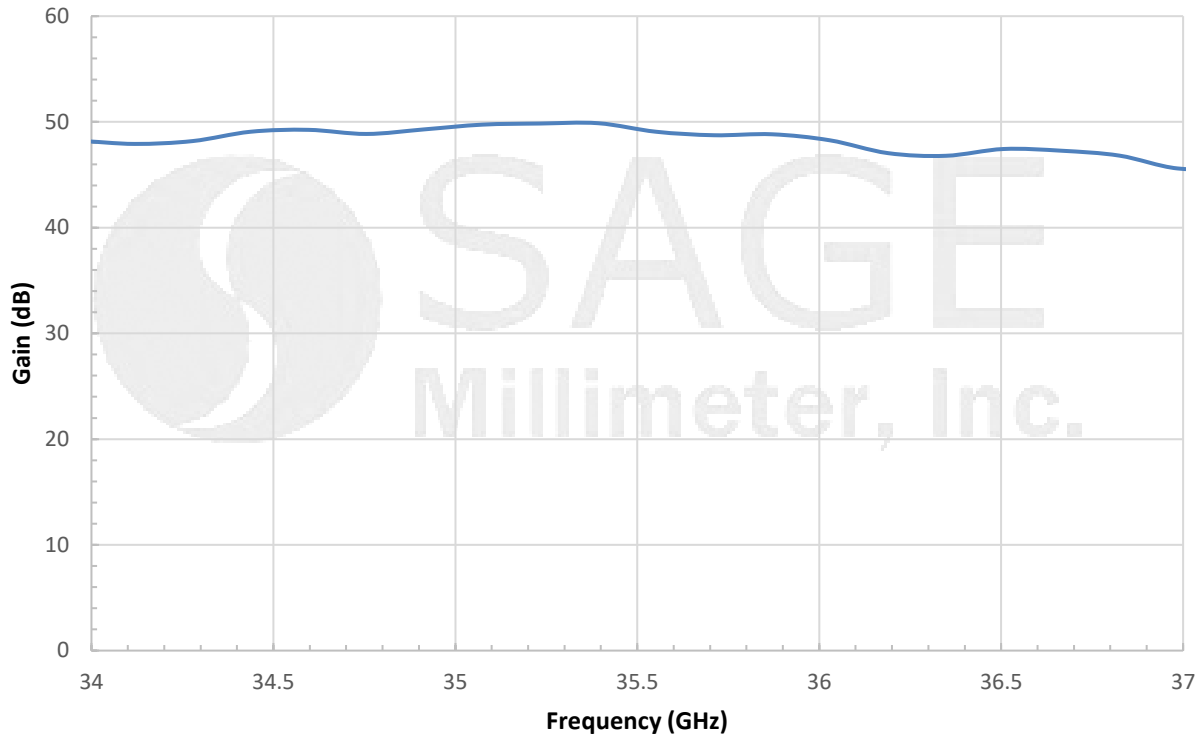




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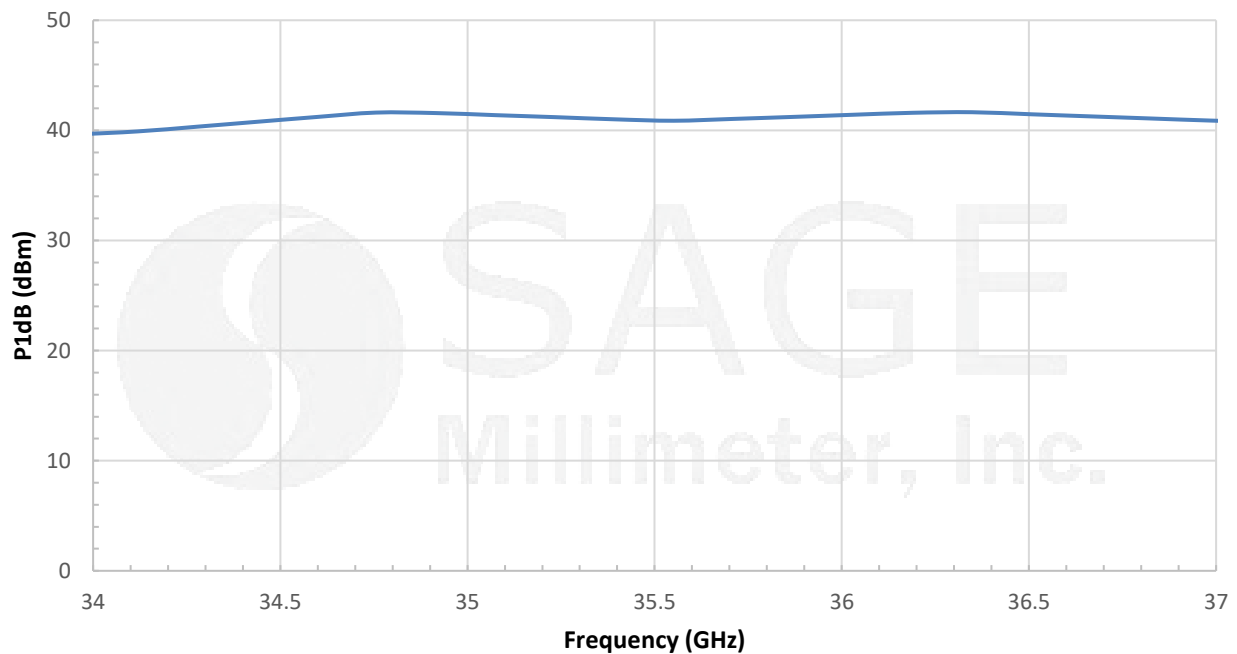
Typical Gain vs. Frequency

DC Bias: +12V / 10 A



Typical P_{1dB} vs Frequency

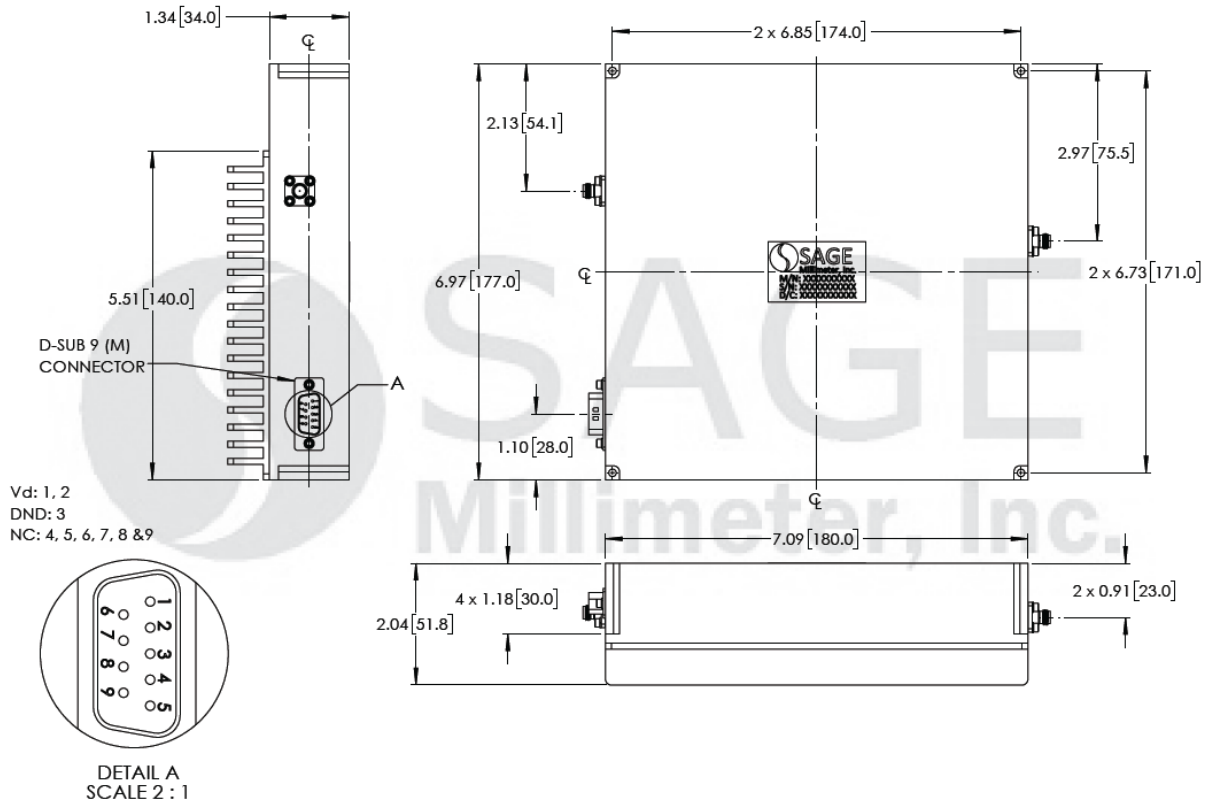
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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



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.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

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 +50 °C. Use proper heatsink or fan if necessary.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

