



34.5 to 36.5 GHz Power Amplifier, 55 dB Gain, +36 dBm P_{1dB}

Description:

Model SBP-3533735536-KFKF-E3 is a power amplifier with a typical small signal gain of 55 dB and a nominal P_{1dB} of +36 dBm across the frequency range of 34.5 to 36.5 GHz. The DC power requirement for the amplifier is +12 V_{DC}/7 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:

- High Gain
- High Output Power

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|----------|---------------------|----------|
| Frequency | 34.5 GHz | | 36.5 GHz |
| Gain | | 55 dB | |
| P _{1dB} | | +36 dBm | |
| P _{sat} | | +37 dBm | |
| Damage P _{in} | | | +5 dBm |
| Input Return Loss | | 10 dB | |
| Output Return Loss | | 10 dB | |
| DC Voltage | | +12 V _{DC} | |
| DC Supply Current | | 7 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 Female Connector |
| Case Material | Aluminum |
| Finish | Chem Film |
| Weight | 13 Oz |
| Size | 6.97" (W) X 7.09" (L) X 2.04" (H) |
| Outline | BP-ZC-3-H |

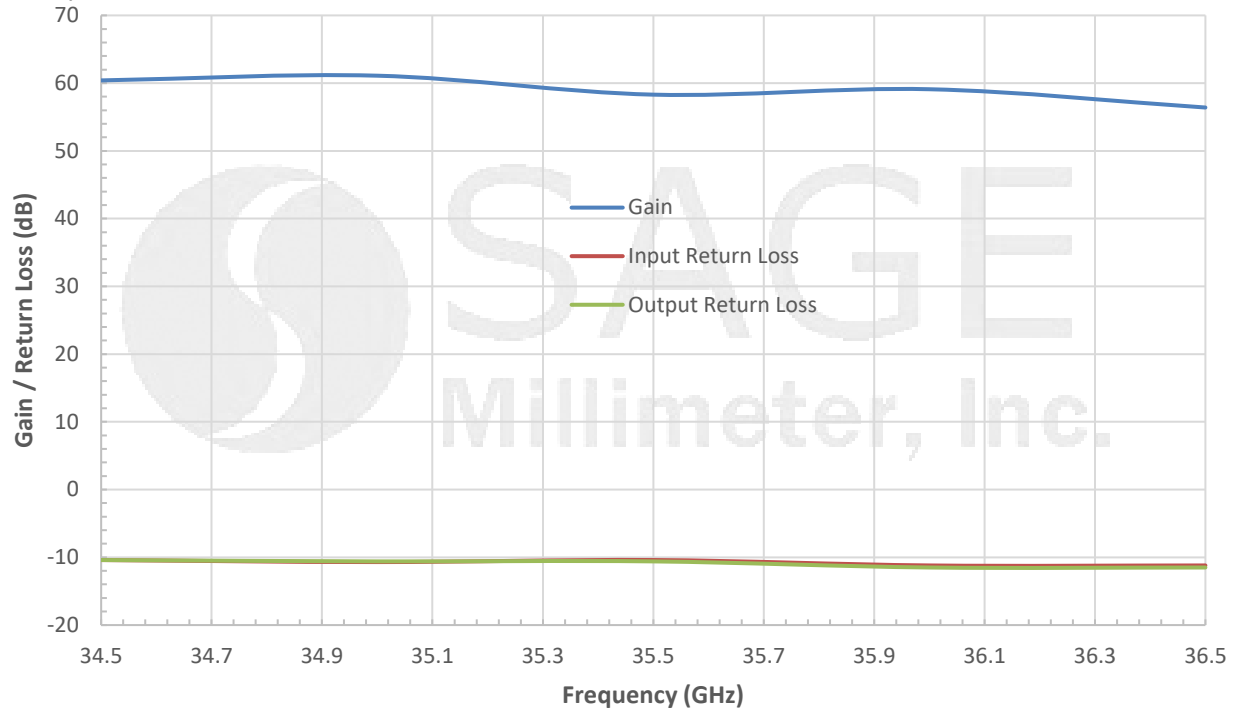




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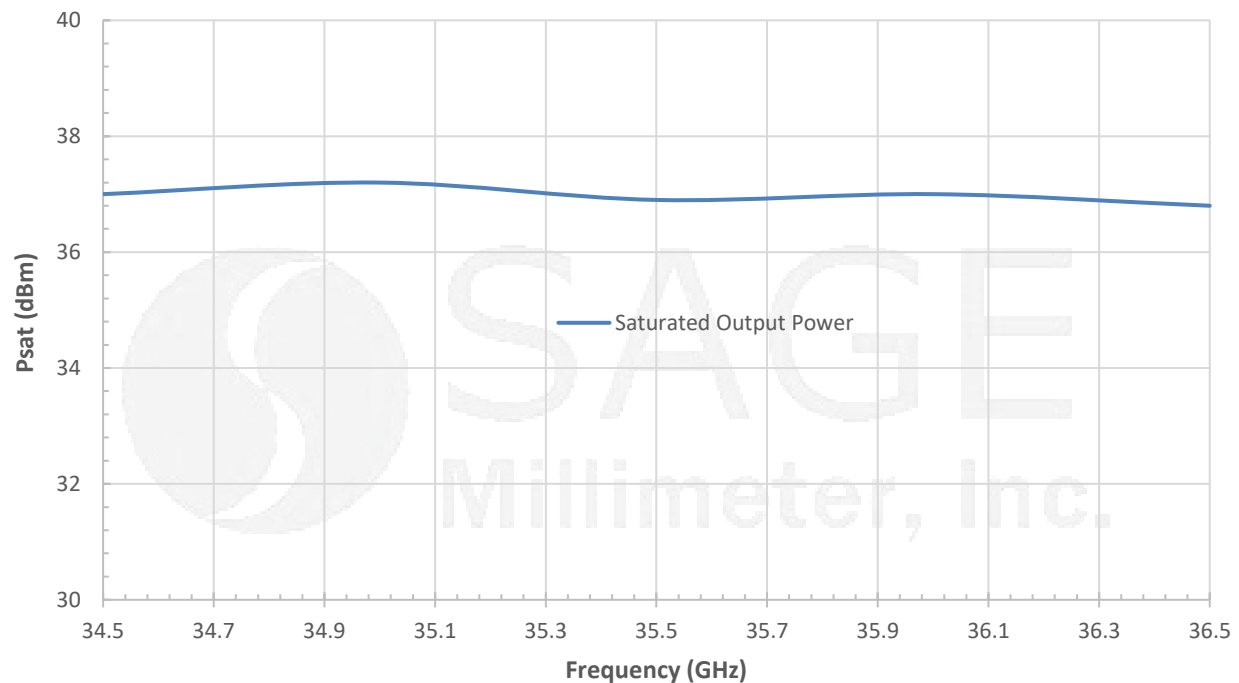
Typical Gain and Return Loss vs. Frequency

RF Input: -50 dBm



Typical Saturated Output Power vs. Frequency

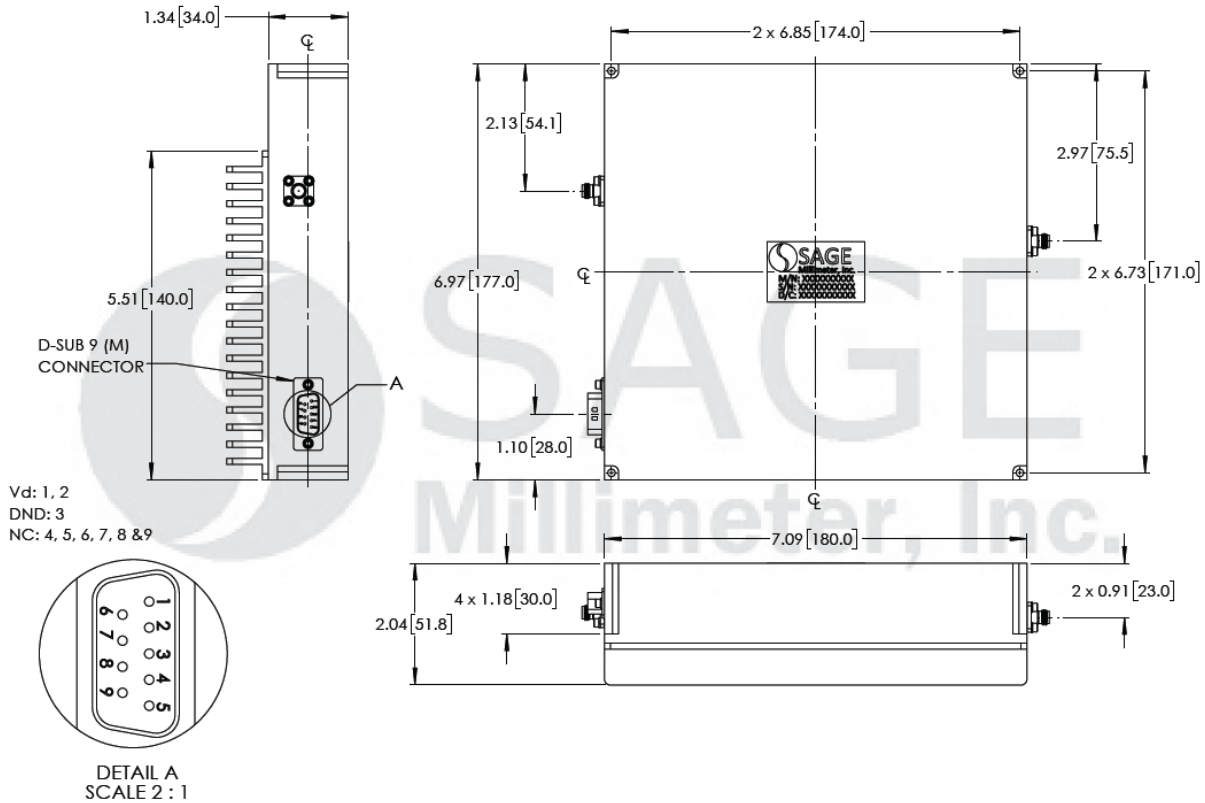
RF Input: -20 dBm





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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.**

