

44 dB Gain High Power High Gain Amplifier at 8 Watt Psat Operating From 1 GHz to 3 GHz with 48 dBm IP3 and SMA

FMAM5037F is a high gain Class A/AB coaxial Linear Power Amplifier operating in the 1000 to 3000 MHz frequency range. The amplifier offers a Wide Dynamic Range with 8 Watts typical saturated power, 44 dB typical small signal gain, ±1.5 dB gain flatness maximum, and a high Output IP3 of +48 dBm typical. The amplifier requires typically a +13V DC power supply, is unconditionally stable, and operates over the temperature range of 0°C and +50°C. The unit includes a Heatsink and Fan.

Electrical Specifications (TA = +25°C, DC Voltage = 13Volts , DC Current = 4,000mA)

| Description | Min | Typ | Max | Unit |
|----------------------------------|-------|-----|-------|-------|
| Frequency Range | 1 | | 3 | GHz |
| Small Signal Gain | 39 | 44 | | dB |
| Gain Flatness | | | ±1.5 | dB |
| Input Power | | | +10 | dBm |
| Psat | | +39 | | dBm |
| P1dB | +37.8 | | | dBm |
| Output 3rd Order Intercept Point | | +48 | | dBm |
| Harmonics @6 Watts | | -20 | | dBc |
| Spurious @6 Watts | | -60 | | dBc |
| Input VSWR | | | 2:1 | |
| Operating DC Voltage | | 13 | | Volts |
| Operating DC Current | | | 4,000 | mA |
| Operating Temperature Range | 0 | | +50 | °C |

Mechanical Specifications

| | |
|------------------|--------------------|
| Size | |
| Length | 8.7 in [220.98 mm] |
| Width | 5.2 in [132.08 mm] |
| Height | 3.5 in [88.9 mm] |
| Weight | 4 lbs [1.81 Kg] |
| Input Connector | SMA Female |
| Output Connector | SMA Female |

Environmental Specifications

| | |
|--------------------|----------------------------|
| Temperature | |
| Operating Range | 0 to +50 deg C |
| Humidity | 95% Non-Condensing |
| Shock | Normal Truck Transport |
| Vibration | Normal Truck Transport |
| Altitude | 10000 feet Above Sea Level |



Features:

- 1000 MHz to 3000 MHz Frequency Range
- Psat 8 Watts typ
- Small Signal Gain: 39 dB min
- Gain Flatness ±1.5 dB max
- Class A/AB
- IP3 48 dBm typ
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply
- RF Input Signal Format CW/AM/FM/PM/Pulse
- SMA Female RF Connectors
- Heatsink and Fan

Applications:

- Military Radio
- Communication Systems
- High Gain Driver Power Amplifier
- High Gain Output Power Amplifier

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Compliance Certifications (visit www.FairviewMicrowave.com for current document)

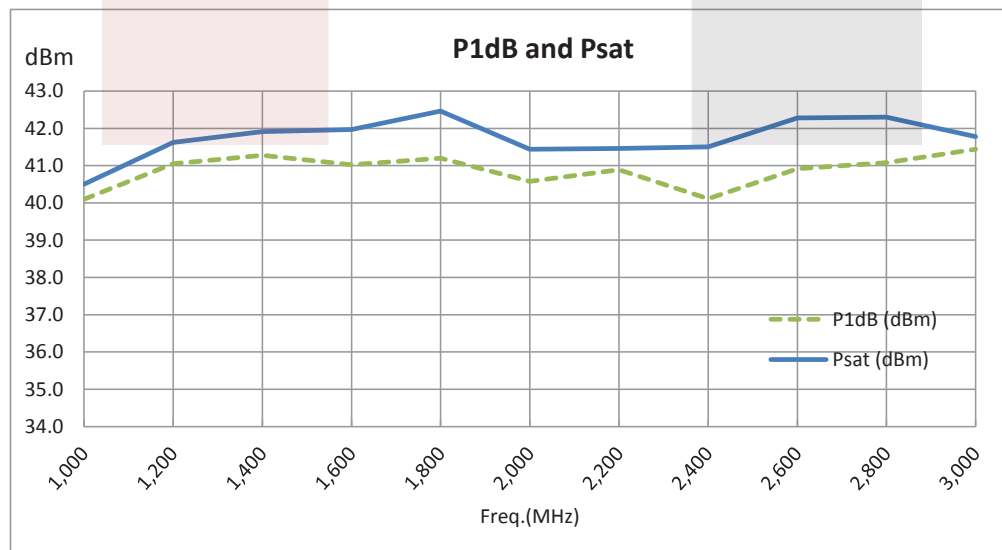
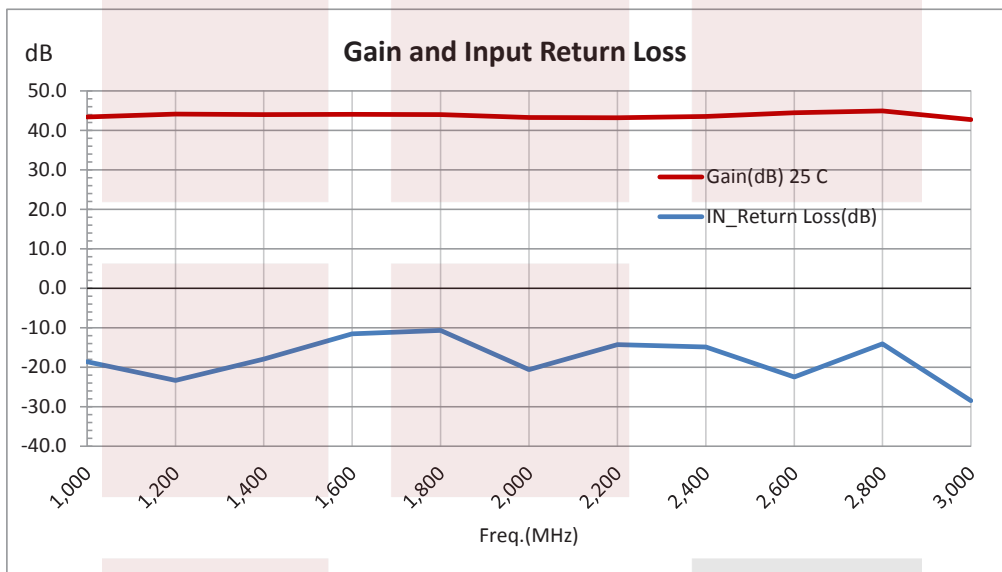
Plotted and Other Data

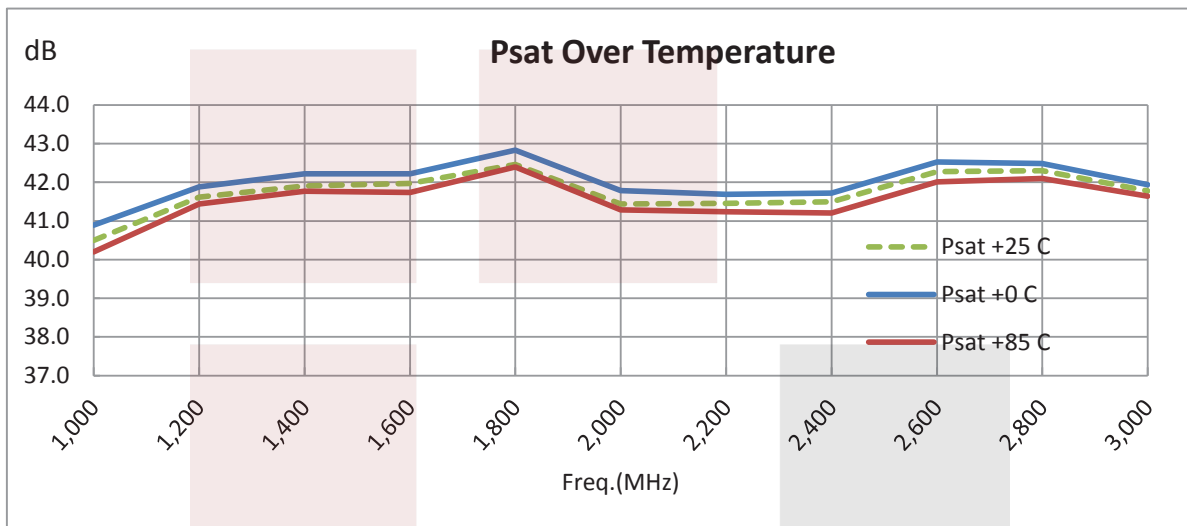
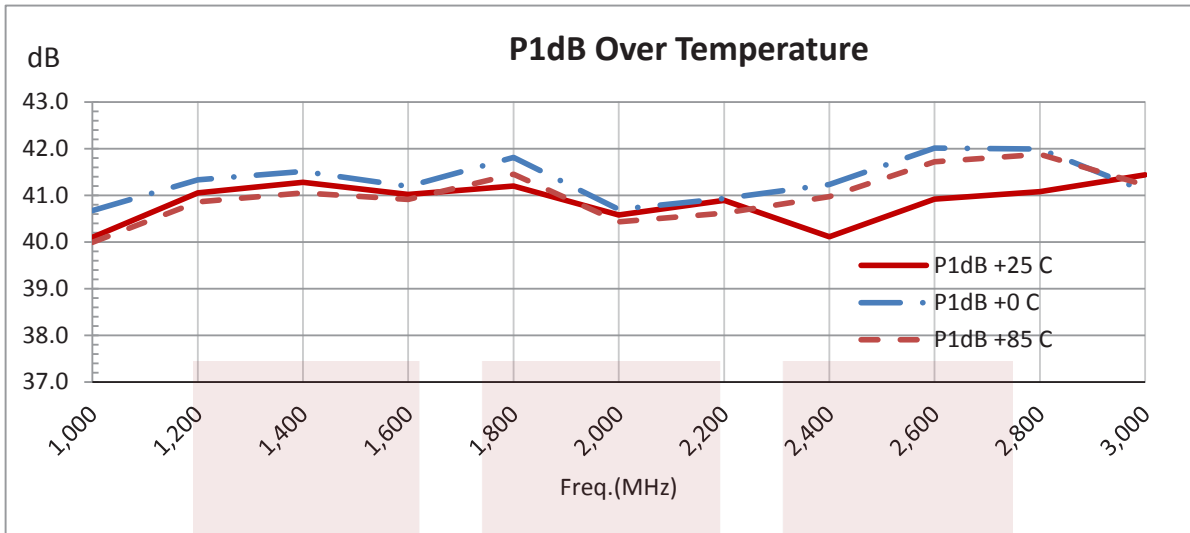
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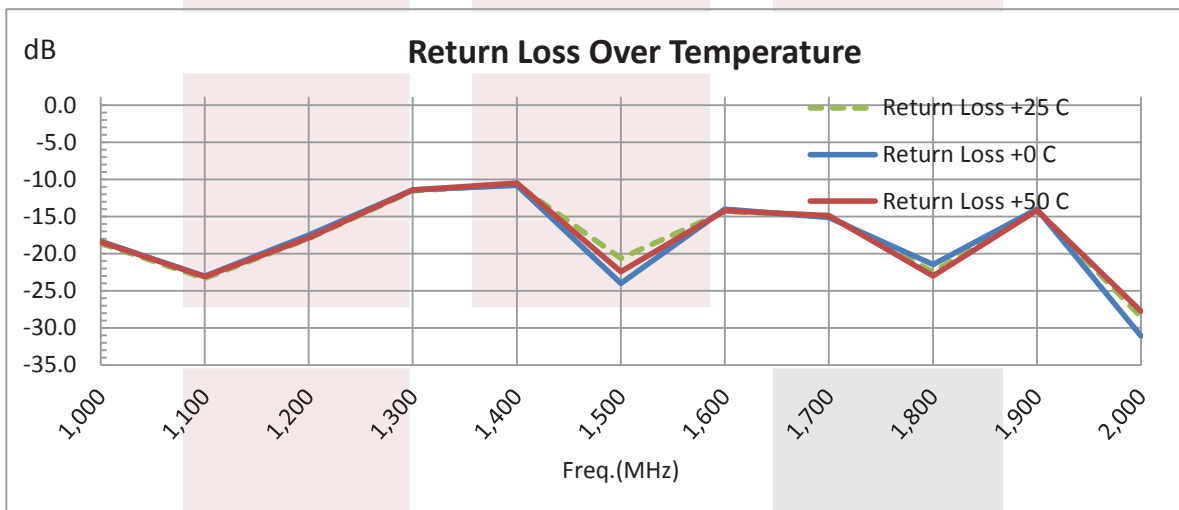
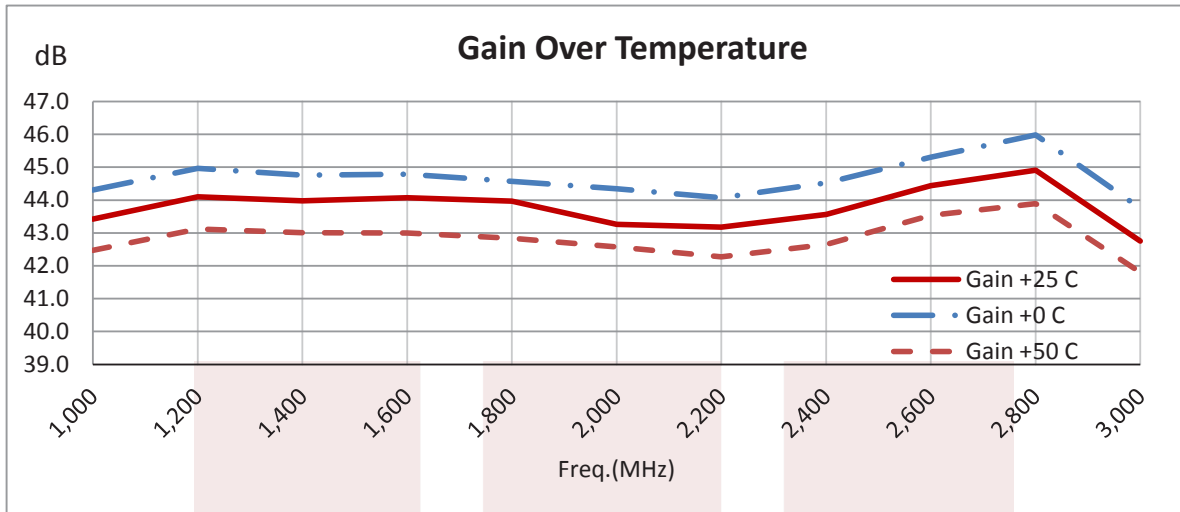
- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.



Typical Performance Data





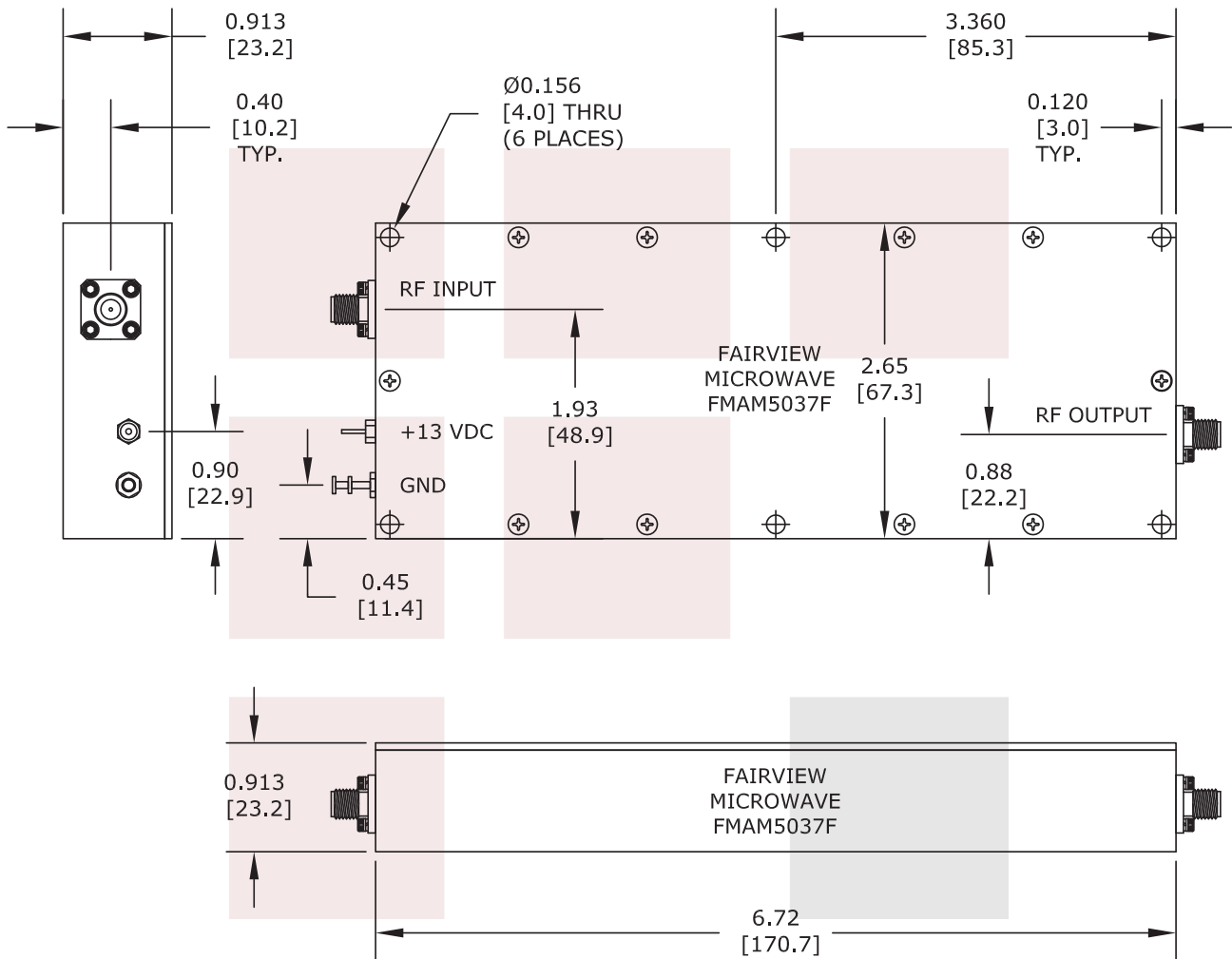


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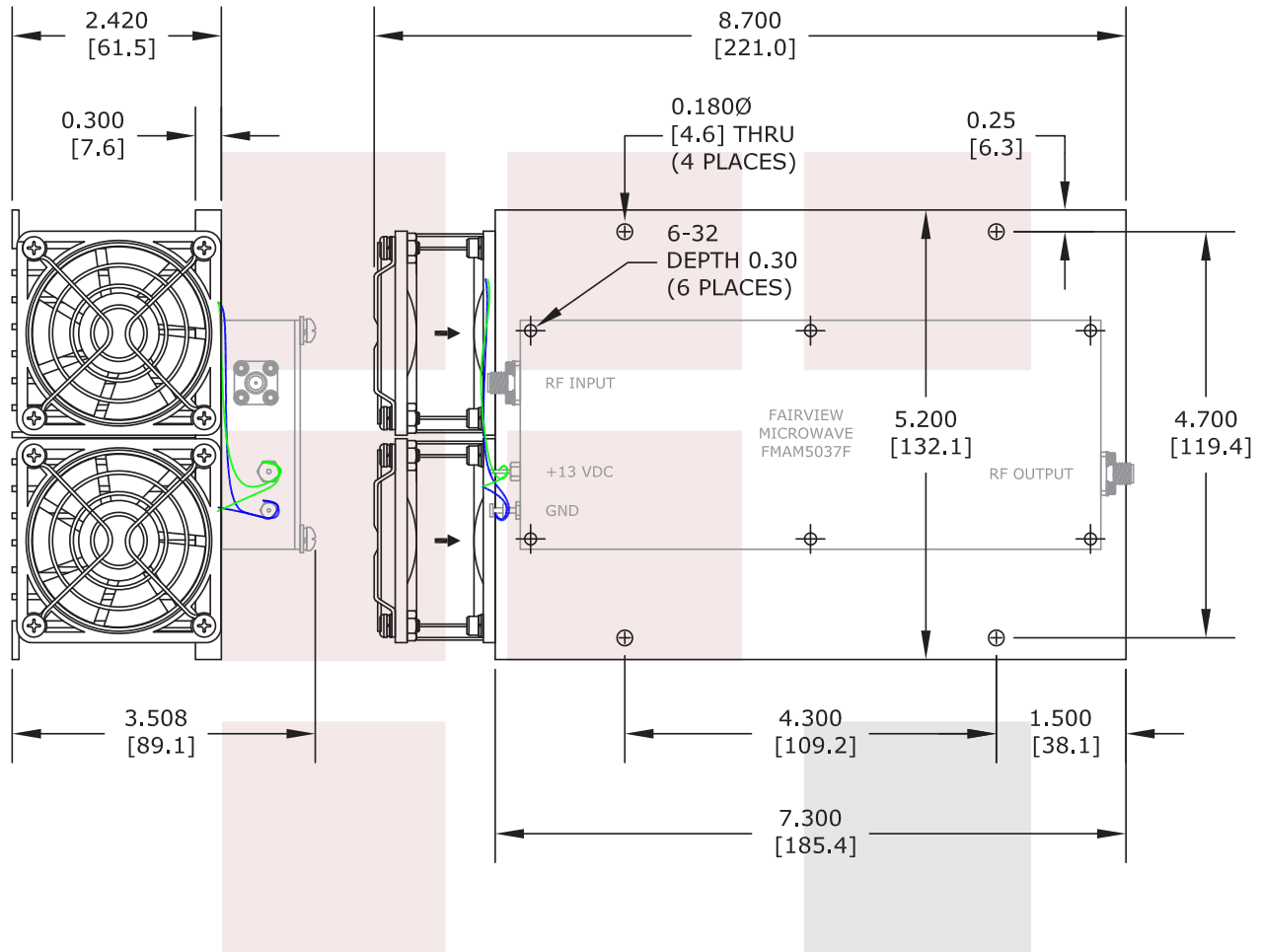
For additional information on this product, please click the following link: [44 dB Gain High Power High Gain Amplifier at 8 Watt Psat Operating From 1 GHz to 3 GHz with 48 dBm IP3 and SMA FMAM5037F](http://www.fairviewmicrowave.com/44db-high-power-high-gain-amplifier-8watt-fmam5037f)

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| TITLE 44 dB Gain High Power High Gain Amplifier at 8 Watt Psat Operating From 1 GHz to 3 GHz with 48 dBm IP3 and SMA | | DWG NO FMAM5037F | | CAGE CODE 3FKR5 | |
| CAD FILE | 051815 | SHEET | SCALE | N/A | SIZE A 2233 |



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