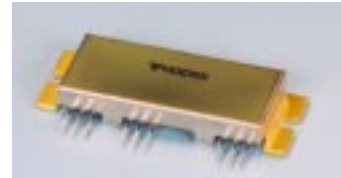




**M/A-COM**



**PA1182** **2300-2400 MHz.**  
**5 Watt** **28v. GaAs Ultra Linear Power**  
**Amplifier**

**Features (typical values)**

- High IP3** ..... +51.0 dBm.
- Low NF** ..... 3.0 dB.
- High Output Power** ..... +37.5 dBm.
- Low Cost**

| Parameter           | Typical Value | Min. Value | Max. Value | Units  |
|---------------------|---------------|------------|------------|--------|
| Frequency           |               | 2300       | 2400       | MHz.   |
| Gain                | 23.0          | 20.0       |            | dB.    |
| Gain Flatness       | +/- 0.3       |            |            | dB.    |
| Pout @ 1dB. comp.   | 37.5          | 36.0       |            | dBm.   |
| Noise Figure        | 3.0           |            | 4.0        | dB.    |
| ACPR (30kHz. BW)*   | -47.0         |            |            | dBc.   |
| VSWR (Input/Output) | 1.5:1/2:1     |            | 2:1/3:1    |        |
| IP3 (two tone)**    | +51.0         | +47.0      |            | dBm.   |
| Supply Required***  | +28/1000      |            | +28/1200   | v./mA. |

\* ± 850kHz from fc at power level of 30dBm. (IS-95)

\*\* IP3 measured with 2 tones @+24dBm. per tone @ 1MHz apart

\*\*\* A 10 micro farad capacitor is required from pin3 (+V) to ground  
 Min and max values from 0 to 85 degrees C

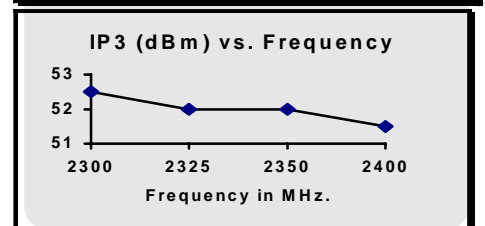
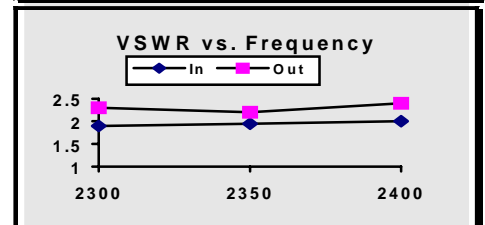
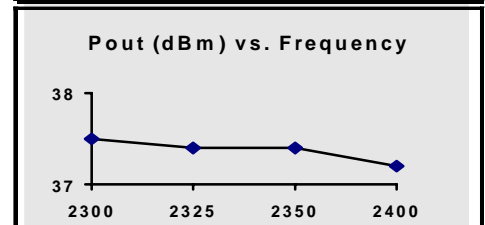
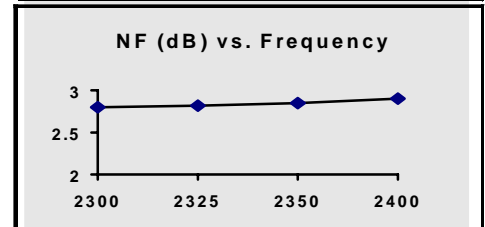
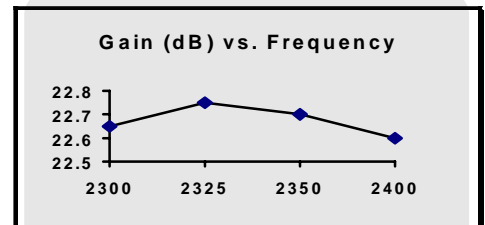
**Outline Drawings**

See Attached Document

**Maximum Ratings**

- Storage Temperature ..... -40°C to +125°C
- DC Voltage ..... +30 volts
- RF Input Power ..... +15 dBm.
- Case Temperature ..... +90°C

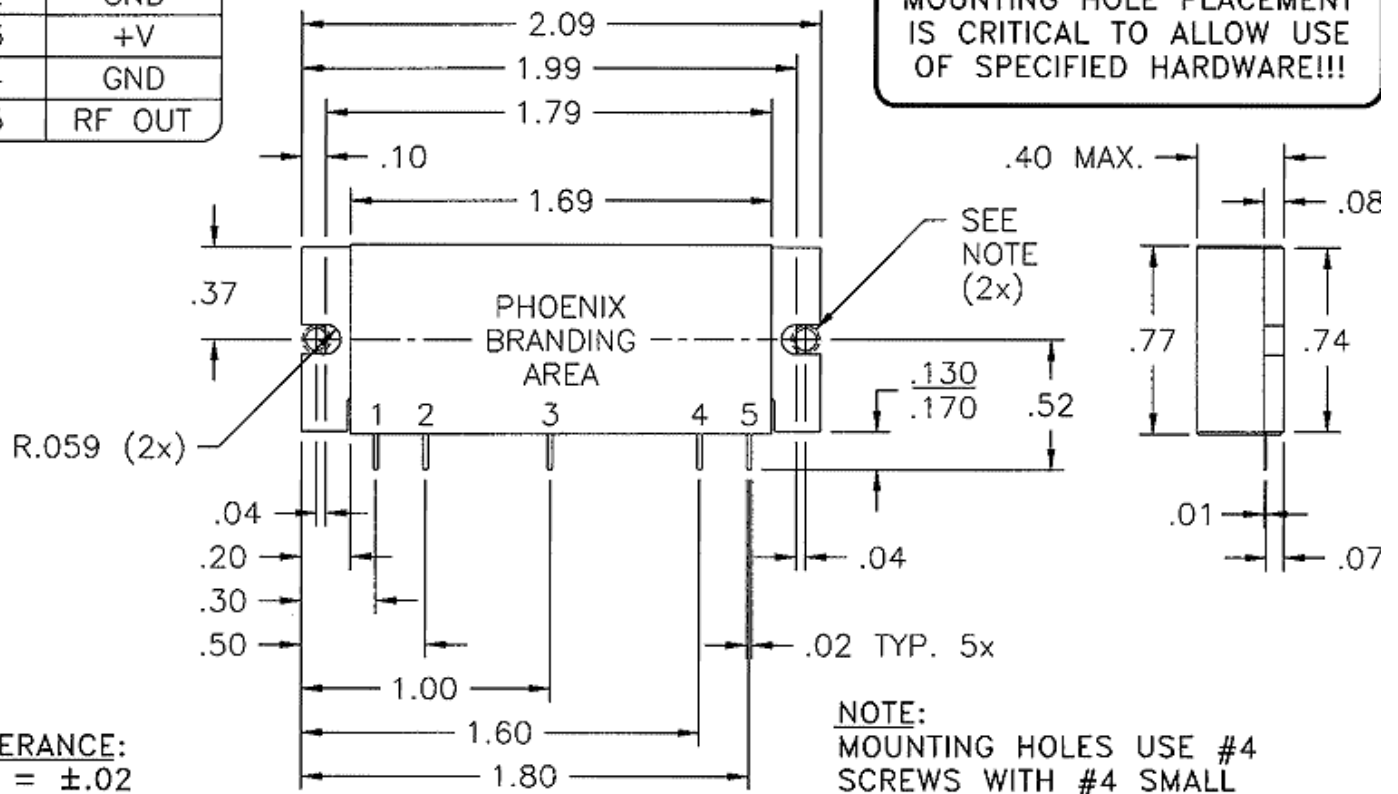
**Typical Performance @+ 25°C**



# OUTLINE DRAWING

| PIN | FUNCTION |
|-----|----------|
| 1   | RF IN    |
| 2   | GND      |
| 3   | +V       |
| 4   | GND      |
| 5   | RF OUT   |

**IMPORTANT!**  
MOUNTING HOLE PLACEMENT IS CRITICAL TO ALLOW USE OF SPECIFIED HARDWARE!!!



**TOLERANCE:**  
.XX = ±.02  
.XXX = ±.010

**NOTE:**  
MOUNTING HOLES USE #4  
SCREWS WITH #4 SMALL  
PATTERN FLAT & LOCK WASHERS.