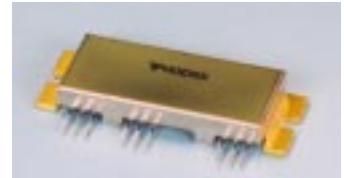


**PA1166** **1930-1990 MHz.**  
**6 Watt** **28v. GaAs Ultra Linear Power**  
**Amplifier** **Amplifier**



**M/A-COM**



**Features (typical values)**

- High IP3** ..... +53.0 dBm.
- Low NF** ..... 3.0 dB.
- High Output Power** ..... +37.5 dBm.
- Low Cost**

Parameter	Typical Value	Min. Value	Max. Value	Units
Frequency		1930	1990	MHz.
Gain	26.0	23.0		dB.
Gain Flatness	+/- 0.3			dB.
Pout @ 1dB. comp.	38	37		dBm.
Noise Figure	2.7		4.0	dB.
ACPR (30kHz. BW)*	-54.0			dBc.
VSWR (Input/Output)	1.5:1/2:1		2:1/3:1	
IP3 (two tone)**	+53.0	+48.0		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

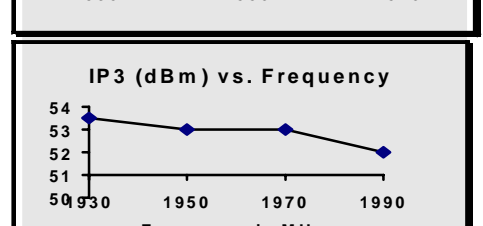
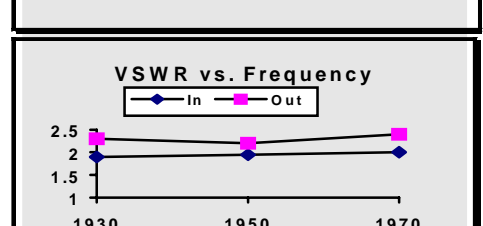
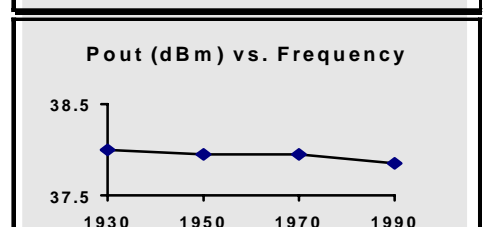
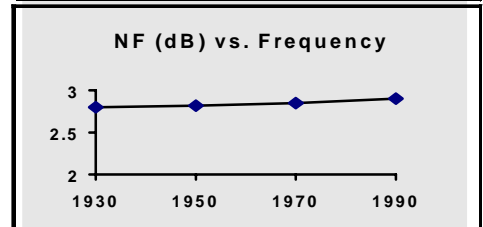
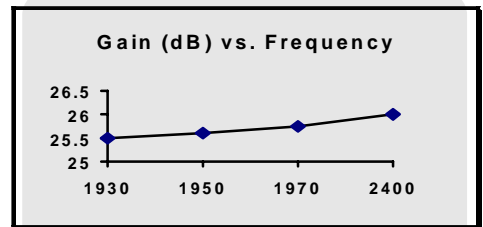
**Outline Drawings**

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

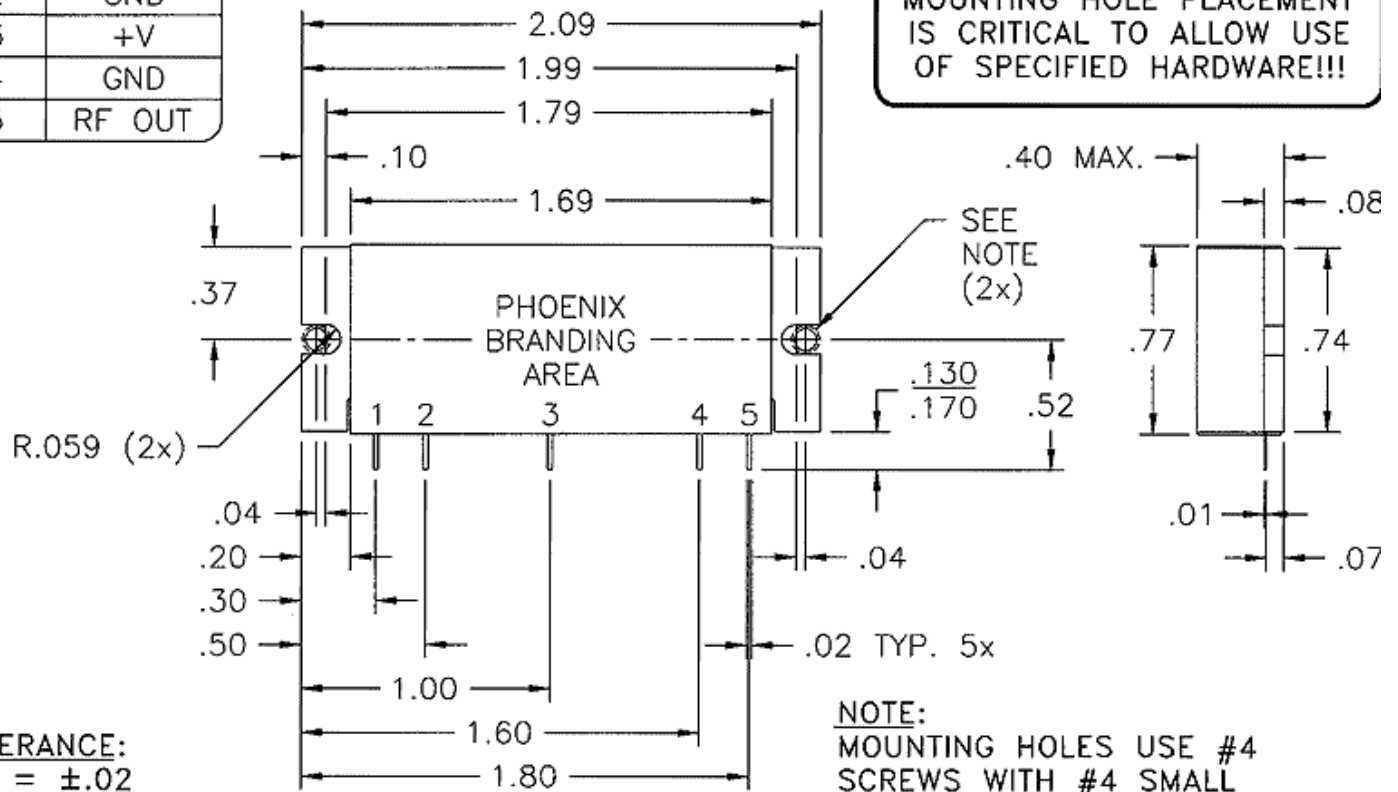
**Typical Performance @+ 25°C**



# 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.