

Features:



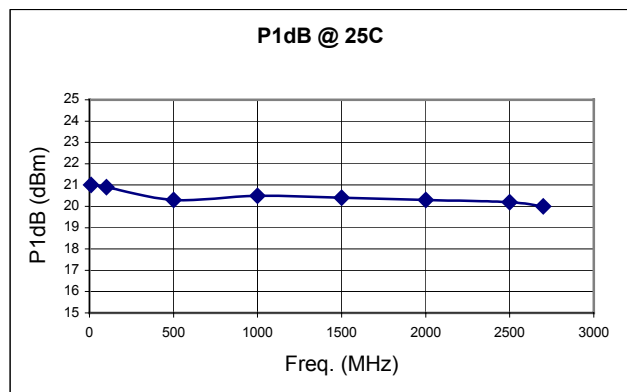
- High IP3 +35 dBm Typical
- High P1dB +20 dBm Typical
- +5 Volt Bias
- 30% High Power Added Efficiency

The MPS-002701-84 is an internally matched GaAs FET amplifier in a surface mount ceramic package. It is ideal for digital communications applications where excellent gain linearity and high efficiency at a 5 Volt bias is required. The device may be directly soldered to a 50 ohm microstrip circuit without additional matching elements.

Specifications

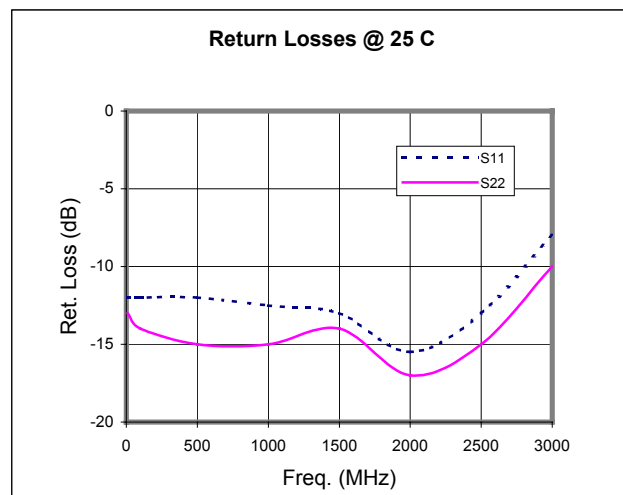
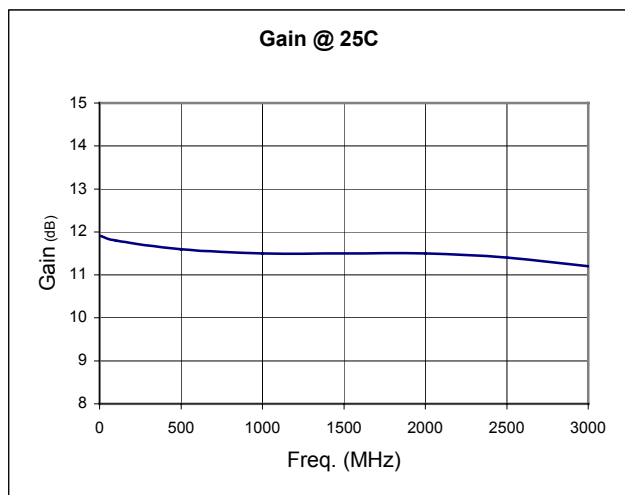
Electrical at 25°C, Vdd = 5.0 V, Zo = 50 ohms

SYMBOL	PARAMETERS	Min	Typical	Max	Unit
Freq.	Frequency Range	3		2700	MHz
SSG	Small Signal Gain	10.5	11.5		dB
P1 dB	Pout at 1 dB Comp Point	+19.0	+20.0		dBm
IP3	Third-Order Intercept Point		+35.0		dBm
VSWR	VSWR, Input VSWR, Output		2.0:1 1.8:1		--
GOF	Gain Var. over Frequency		± 0.5	±0.8	dB
GOT	Gain Var. over Temperature		-0.15		dB/°C
NF	Noise Figure 50 – 100 MHz 100 – 500 MHz 500 – 2700 MHz		8 6 5		dB
Idd	DC Current		120	160	mA

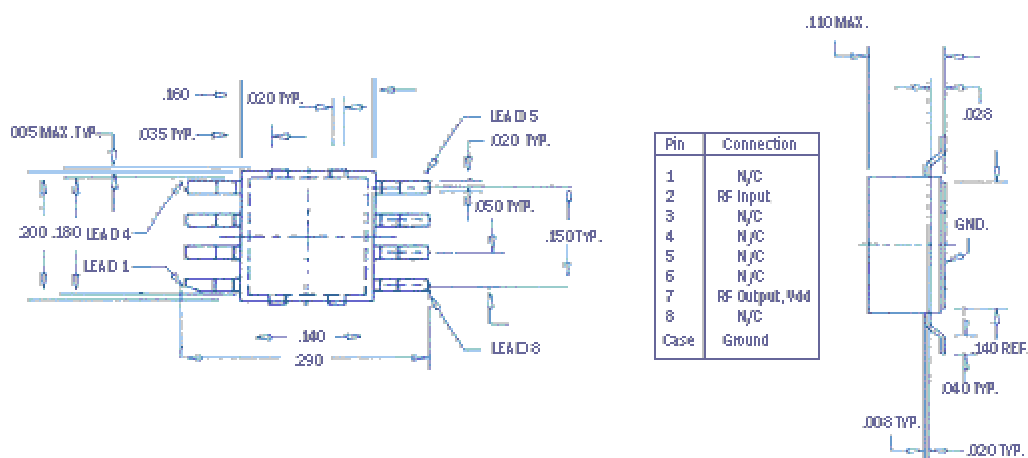


Absolute Maximum Ratings

Maximum Bias Voltage	6.0 V
Maximum Continuous RF Input Power	200 mW
Maximum Peak Input Power	300 mW
Maximum Case Operating Temperature	+85 °C
Maximum Storage Temperature	- 65 °C to + 150 °C



Outline Diagram



Application Circuit (50MHz TO 2700MHz)

