

Features:



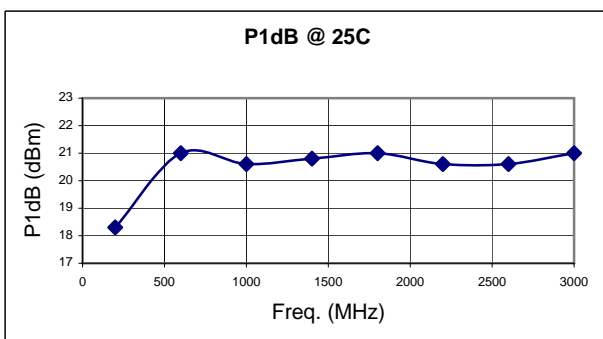
- High IP3 +34 dBm Typical
- High P1dB +20 dBm Typical
- Variable Gain
- +5 Volt Bias
- 30% High Power Added Efficiency

The MPS-032701A-82 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

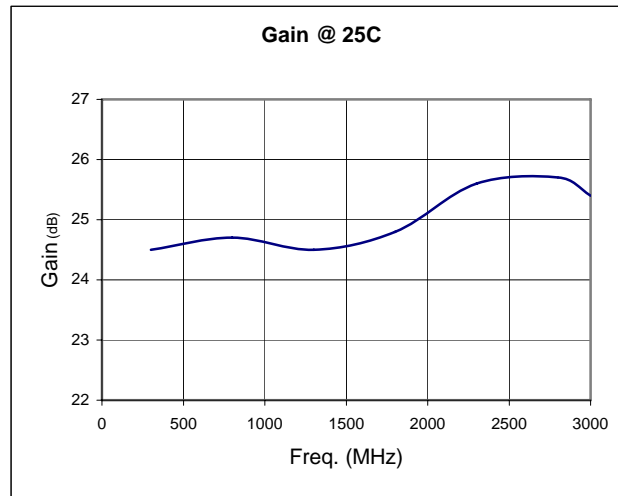
● Electrical at 25°C, Vdd = 5.0 V, Zo = 50 ohms

| SYMBOL | PARAMETERS | Min | Typical | Max | Unit |
|--------|-----------------------------|-------|----------------|------|-------|
| Freq. | Frequency Range | 300 | | 2700 | MHz |
| SSG | Small Signal Gain | | 20.0 | | dB |
| P1 dB | Pout at 1 dB Comp Point | +19.0 | +20.0 | | dBm |
| IP3 | Third-Order Intercept Point | | +34.0 | | dBm |
| VSWR | VSWR, Input VSWR, Output | | 2.0:1 2.0:1 | | -- |
| GOF | Gain Var. over Frequency | | ± 1.1 | | dB |
| GOT | Gain Var. over Temperature | | -0.15 | | dB/°C |
| NF | Noise Figure | | 5 | | dB |
| Idd | DC Current | | 320 | 360 | mA |

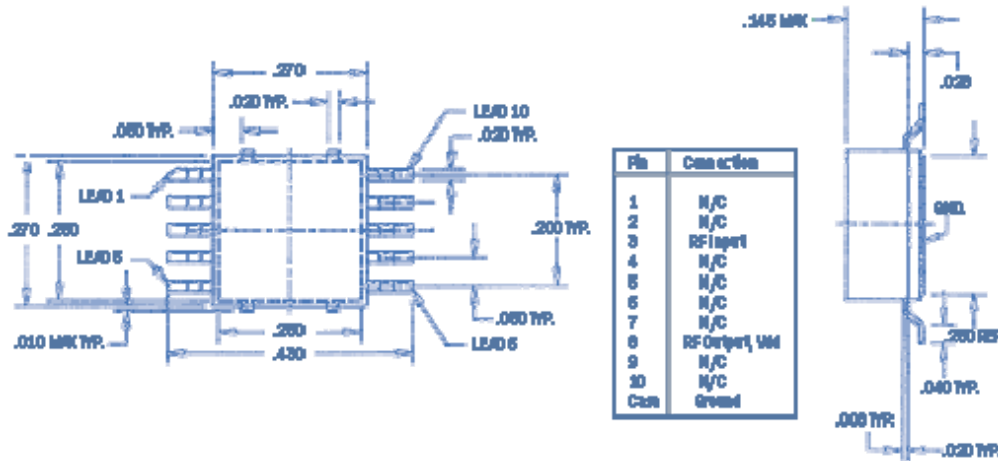


Absolute Maximum Ratings

| | |
|------------------------------------|---------------------|
| 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 (300MHz TO 2700MHz)

