

Features:



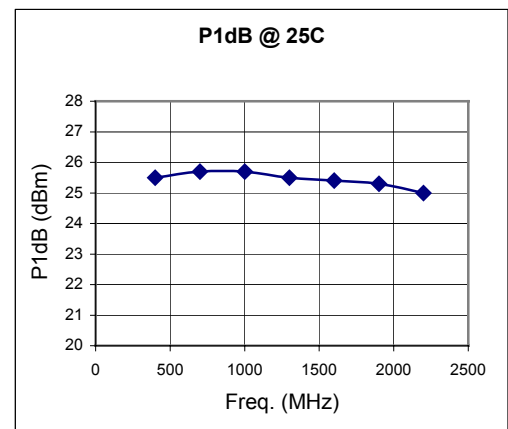
- 1.2:1 Typical Output VSWR
- 14 dB Typical Gain
- +42 dBm Typical IP3
- Single Positive Bias
- High P1dB +25 dBm Typ (.4-2.1GHz)
- Surface Mount Package

The MPS-0425A9D-82 is a high linearity modular amplifier designed to meet the ultra-linear transmitter driver requirements for commercial AMPS, IS-54 and GSM base stations. Key advantages are low intermodulation performance for multi-carrier or wideband CDMA systems and exceptionally low input/output return loss for ease of integration.

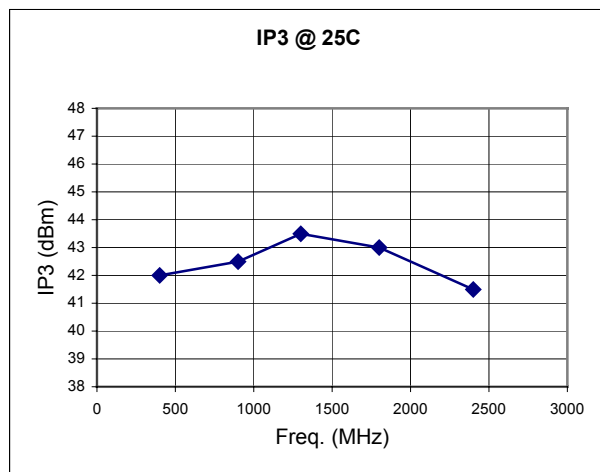
Specifications

● Electrical at 25°C, Vdd = 7.5 V, Zo = 50 ohms

| SYMBOL | PARAMETERS | Min | Typical | Max | Unit |
|---------|----------------------------------------------|-------|---------|-------|-------|
| Freq. | Frequency Range | 400 | | 2500 | MHz |
| SSG | Small Signal Gain | 13.0 | 14.0 | | dB |
| P1 dB | Pout at 1 dB Comp Point | | | | dBm |
| | 0.4 – 2.1 GHz | +24.0 | +25.0 | | |
| | 2.1 – 2.5 GHz | | +23.0 | | |
| IP3 (1) | Third-Order Intercept | +40.0 | +42.0 | | dBm |
| VSWR | Input VSWR | | 1.4:1 | 1.7:1 | |
| | Output VSWR | | 1.2:1 | 1.7:1 | |
| GOF | Gain Var. over Frequency (over 200MHz BW) | | ± 0.5 | ±0.8 | dB |
| | | | ± 0.2 | ±0.5 | |
| GOT | Gain Var. over Temp | | -0.015 | | dB/°C |
| Idd | DC Current | | 300 | 330 | mA |

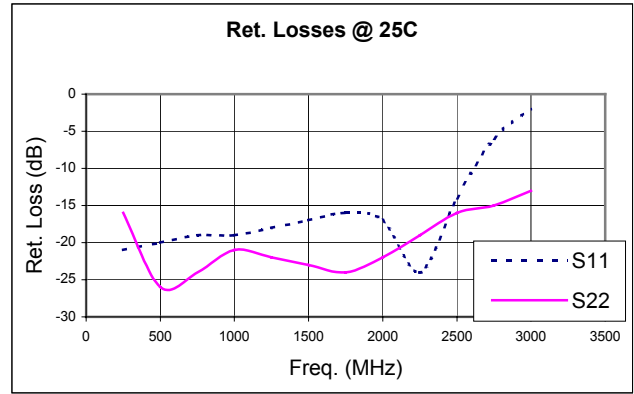
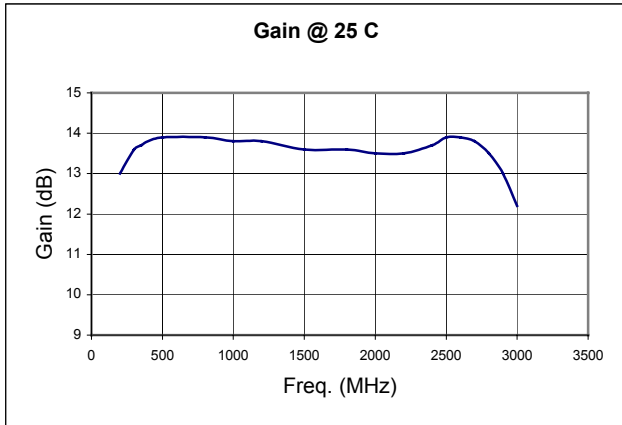


(1) Two tone test @ 13 dBm/tone, centered at 1.5 GHz with separation of 10 MHz.

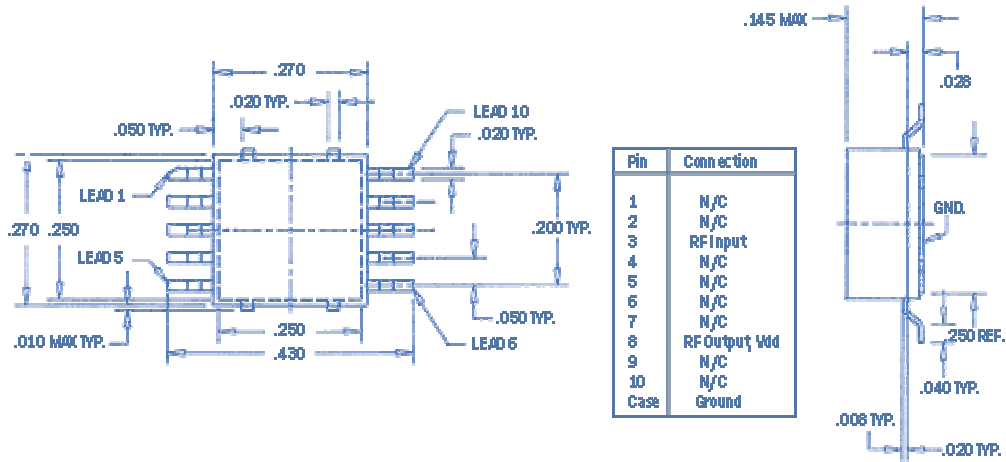


Absolute Maximum Ratings

| | |
|------------------------------------|------------------|
| Maximum Bias Voltage | 8.0 V |
| Maximum Continuous RF Input Power | +25 dBm |
| Maximum Peak Input Power | +27 dBm |
| Maximum Case Operating Temperature | +85 °C |
| Maximum Storage Temperature | - 65 to + 150 °C |



Outline Diagram



Application Circuit

