

AMP-5800
SMALL 4.9-5.9 GHz RF LINEAR
AMPLIFIER 500MW



This is a smallest linear amplifier for 4.9 GHz- 5.9 GHz band. This small amplifier requires 1 mW input RF Power for the maximum output power of 500 mW. It is excellent for security applications or small airplane models. It works at 3 V -5 V with a current consumption of 550 mA. Dimensions: 25 mm X 19 mm

Features

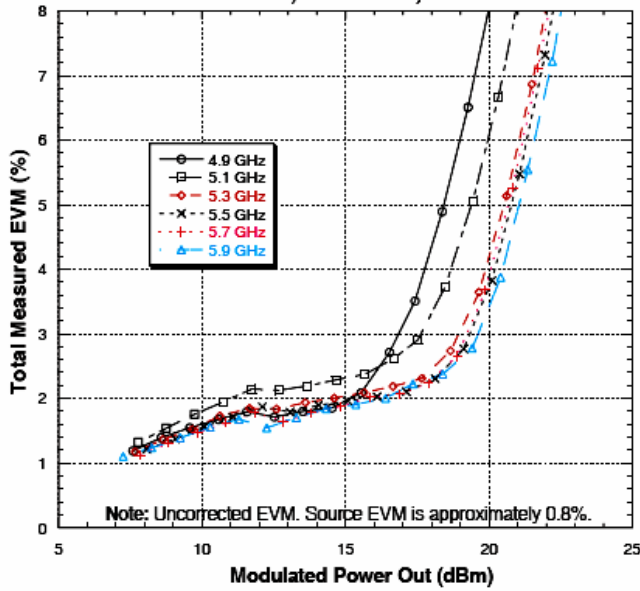
- Full 4.9 to 5.9 GHz operation
- 34 dB small signal gain
- 230 mA total current at 18 dBm modulated power out
- 2.3% EVM at 18 dBm modulated power out
- 3.3 V collector supply voltage
- Integrated power detector with 20 dB dynamic range
- Lead-free 5 x 5 x 1.5 mm leadless package
- Internally matched to 50 and DC blocked RF input/output
- Internal DC bias de-coupling
- Optimized for use in 802.11a applications

Performance Data

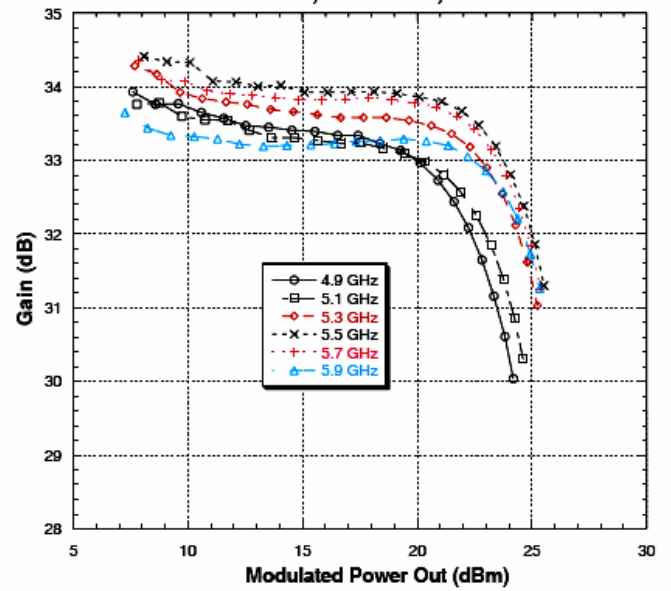
802.11a OFDM Modulation

(176 ms burst time, 100 ms idle time) 54 Mbps Data Rate, 16.7 MHz Bandwidth

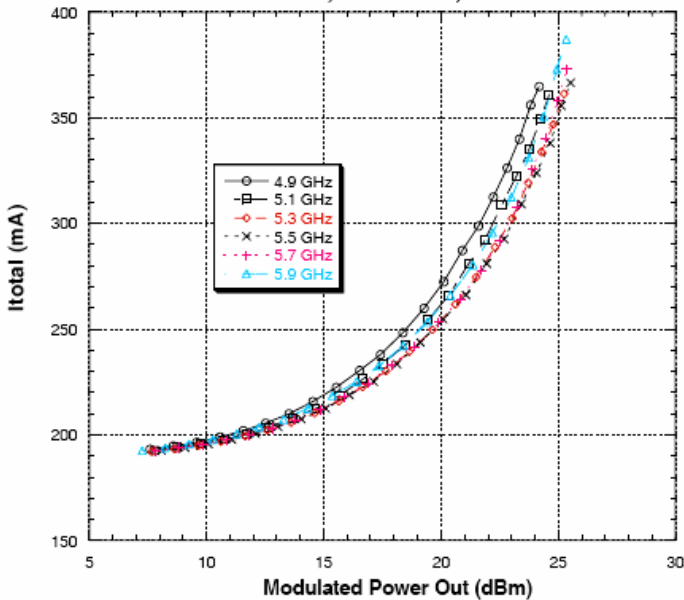
EVM vs. Modulated Pout
VCC=3.3V, VPC=2.9V, T=25°C



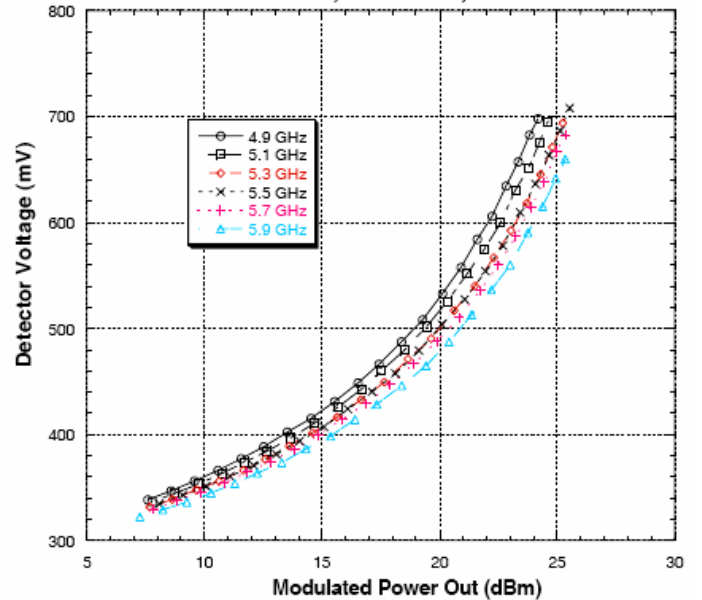
Gain vs. Modulated Pout
VCC=3.3V, VPC=2.9V, T=25°C



Total Current vs. Modulated Pout
VCC=3.3V, VPC=2.9V, T=25°C

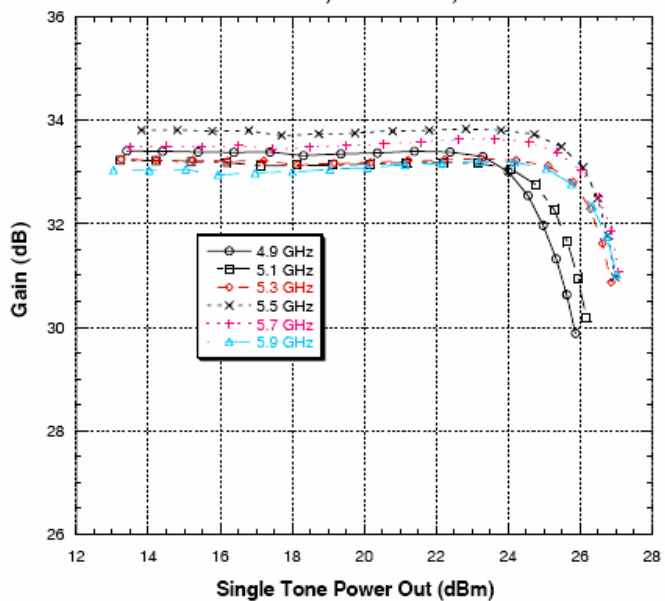


Detector Voltage vs. Modulated Pout
VCC=3.3V, VPC=2.9V, T=25°C



Performance Data Single Tone

Gain vs. Single Tone Pout VCC=3.3V, VPC=2.9V, T=25°C



S-Parameters vs. Frequency VCC=3.3V, VPC=2.9V, T=25°C

