

SAC3131

GaAs MMIC Power Amplifier
4GHz~6GHz 36dBm

Rev1.0

Features

- Frequency: 4GHz~6GHz
- Gain: 22dB
- Output P_{-1dB}: 36dBm
- Supply Voltage: +8V/-V_G
- Power-Added Efficiency: 35%@+5V Supply
- Package: QFN6

Electrical Performance (T_A=25°C, V_D=+8V, I_D=2.2A, Z₀=50Ω)

Parameter	Min.	Typ.	Max.	Units
Frequency Range	4 ~ 6			GHz
Small Signal Gain	20	22	—	dB
Small Signal Gain Flatness	—	—	±1.5	dB
Reverse Isolation	—	-40	—	dB
Input Return Loss	—	-12	—	dB
Power-Added Efficiency(@OP _{-1dB})	—	35	—	%
Output Power for 1 dB Compression (OP _{-1dB})	35	36	—	dBm
3 rd Intermodulation Distortion*	-20	-24	—	dBc
2 nd Harmonic Distortion**	—	-40	—	dBc
3 rd Harmonic Distortion**	—	-60	—	dBc
Drain Voltage(V _D)	—	8	—	V
Supply Current(I _D)	—	2.4	3.2	A

* Δ f=2MHz 2-Tone Test Pout=30dBm S.C.L.

** Pout=30dBm

Absolute Maximum Ratings

Maximum Input Power	+22dBm	Operating Temperature	-55°C~+85°C
Channel Temperature	+150°C	Storage Temperature	-65°C~+150°C
Maximum V _D	+8.5V	Maximum V _G	-1.2V

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Outline Drawing

(all dimensions in mm)

