Oki Semiconductor KGF2237

Advance Information

850-MHz Cellular Driver/PA MMIC

GENERAL DESCRIPTION

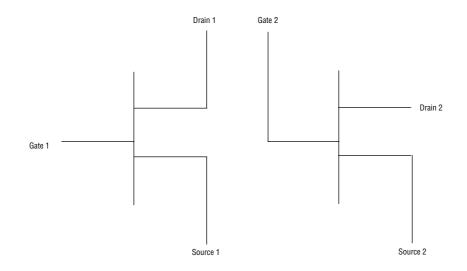
Oki's KGF2237 is a 850-MHz Cellular Driver/Power Amplifier (PA) MMIC. This part is designed for CDMA transmitter application for cellular handsets. The KGF2237 has excellent analog and digital efficiency and superior ACPR performance for CDMA application. The KGF2237 requires external input, interstage and output matching for optimum performance and an input of +3 V for each drain. Both the driver and power FETs are on a single GaAs chip which is surface-mounted (SMD) on a 16-pin SSOP heat sink package.

FEATURES

- Superior ACPR performance
- Excellent analog and digital efficiency
- CDMA transmitter application for cellular handsets
- Driver and power FETs on single GaAs chip
- 16-pin SSOP SMD heat sink package

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BLOCK DIAGRAM



ELECTRICAL CHARACTERISTICS

Recommended Operating Conditions

| Parameter | Specificatiion |
|--|---|
| Operating Frequency Range | 824 to 849 MHz |
| Gain (small signal, digital mode) Po = 0 dBm | 28 dB |
| Noise Power (889 to 894 MHz) | -138 dBm/Hz (all power levels) |
| Harmonics Po = 1.5 W | -30 dBc for 2 fo and 3 fo |
| Analog Mode Po Pin = 5.0 mW min. | 1.5 W |
| Analogy Mode Efficiency Load VSWR 2:1 all angles Po = 1.5 W V _{DD} = 3.0 V ±5% Pin = 5.0 mW | 55% |
| Digital Mode Po | 631 mW (28 dBm) |
| Digital Mode Efficiency Load VSWR 2:1 all angles Po = 500 mW V _{DD} = 3.0 V | 30% |
| Adjacent Channel Power Rejection CDMA Waveform Load VSWR 2:1 (all angles) | Offset ±885 KHz (28 dBc), Offset ±1.98 KHz (41 dBc) |
| Noise Figure (824 to 849 MHz) | 6 dB max. |
| V _{DD} | 3.0 V ±5% |
| Package | 16-pin SSOP with heat sink |

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Notes:

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Please make sure before using the product that the information you are referring to is up-to-date.

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