ADVANCE INFORMATION

All information in this data sheet is preliminary and subject to change. 6/95

/VI/XI/VI 800MHz to 1000MHz Low-Voltage Power Amplifier/Predriver

General Description

The MAX2430 RF power amplifier operates from a 3V to 5V supply and delivers more than 100mW (20dBm) in the 800MHz to 1000MHz band. The MAX2430 consists of a large power transistor driven by a capacitively coupled driver stage. The input impedance is internally matched to 50Ω (VSWR < 1.5:1) and the overall power gain is guaranteed to be greater than 30dB.

To save power during the "idle slots" in time-division multiple-access (TDMA) transmissions, a TTL/CMOScompatible command (EN pin low) can throttle the supply current to under 10µA in only 1µs. A power ramping feature allows the final stage on/off time to be controlled by a single external capacitor. Variable power-gain control of the final stage is also possible for use in a power control loop. The MAX2430 comes in a 16-pin narrow SO package

Applications

Cordless Phones Wireless LANs Cellular Phones 915MHz ISM Band Applications

Features

- 3-Cell Battery Operation
- >100mW Output Power (at 3V)
- 30dB Power Gain
- Power Up/Down Ramp Time Controlled by **External Capacitor**
- + Input Matched to 50Ω
- 10µA Power-Down Current
- Comes in 16-Pin Narrow SO

MAX2430

Ordering Information

PART	TEMP. RANGE	PIN-PACKAGE
MAX2430CSE	0°C to +70°C	16 Narrow SO

Pin Configuration TOP VIEW Vcc 12 8nH VCC2 VCC1 GND3 16 GND3 Vcc 15 GND3 EN 2 ΕN OUTPU' BIAS RFC BIAS GND2 3 14 GND4 MAXIM GND' RFIN 4 13 GND4 MAX2430 12 GND4 GND2 5 RFOUT -RFIN 11 GND4 GND1 DRIVE GAIN . 15Ω VCC1 10 VB 50Ω MAXIM MAX2430 VCC2 9 RFOUT GND4 GND3 GND2 so

Typical Operating Circuit



Call toll free 1-800-998-8800 for free samples or literature.