ADVANCE INFORMATION

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

10/96

MAXIM

VHF-to-Microwave, +3V, Low-Noise Amplifiers

General Description

The MAX2630/MAX2631/MAX2632/MAX2633 are low-voltage, low-noise amplifiers for use from VHF to microwave frequencies. Operating from a single +2.7V to +5.5V supply, they have a flat gain response to 900MHz. Their low noise figure and low supply current make them ideal for receive, buffer, and transmit IF applications.

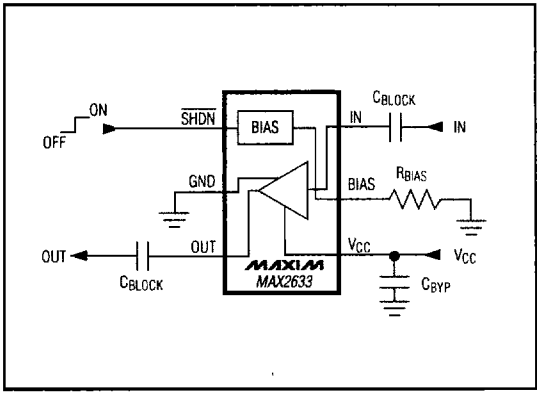
The MAX2630/MAX2631 are biased internally, eliminating the need for external bias resistors or inductors. The MAX2632/MAX2633 have a user-selectable supply current, adjustable by adding a single external resistor, which allows customized output power and gain according to specific application requirements. The MAX2631/MAX2633 feature a shutdown pin that allows them to be powered down to typically 0.1µA supply current. Aside from a single bias resistor required for the MAX2632/MAX2633, the only external components needed for this family of devices are input and output blocking capacitors and a V_{CC} bypass capacitor.

The MAX2630 comes in a 4-pin SOT143 package, requiring minimal board space. The MAX2631/MAX2632 come in small, 5-pin SOT23-5 packages. The MAX2633 comes in a 6-pin SOT23-6 package.

Applications

Personal Communicating Systems	Cordless Phones
Global Positioning Systems	Cellular Phones
Wireless Local Area Networks	ISM Radios
Wireless Local Loops	TV Tuners
Land Mobile Radios	Set-Top Boxes

Typical Operating Circuit



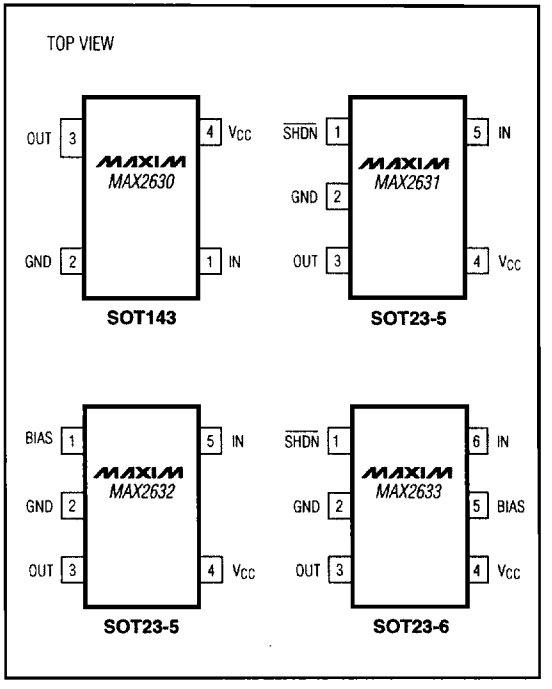
Features

- ♦ **Single +2.7V to +5.5V Operation**
- ♦ **Internally Biased (MAX2630/MAX2631)**
- ♦ **Adjustable Bias (MAX2632/MAX2633)**
- ♦ **6.6mA Supply Current (insensitive to supply voltage)**
- ♦ **0.1µA Shutdown Current (MAX2631/MAX2633)**
- ♦ **3.7dB Noise Figure**
- ♦ **Ultra-Small SOT Packages**

Ordering Information

PART	TEMP. RANGE	PIN-PACKAGE
MAX2630EUS	-40°C to +85°C	4 SOT143
MAX2631EUK	-40°C to +85°C	5 SOT23-5
MAX2632EUK	-40°C to +85°C	5 SOT23-5
MAX2633EUT	-40°C to +85°C	6 SOT23-6

Pin Configurations



11