Low-Voltage Mixer FM IF System with Filter Amplifier and Data Switch

SA639DH

Archived

This page contains information on a product that is no longer manufactured (discontinued). Specifications and information herein are available for historical reference only.

Last Updated: Mar 26, 2024

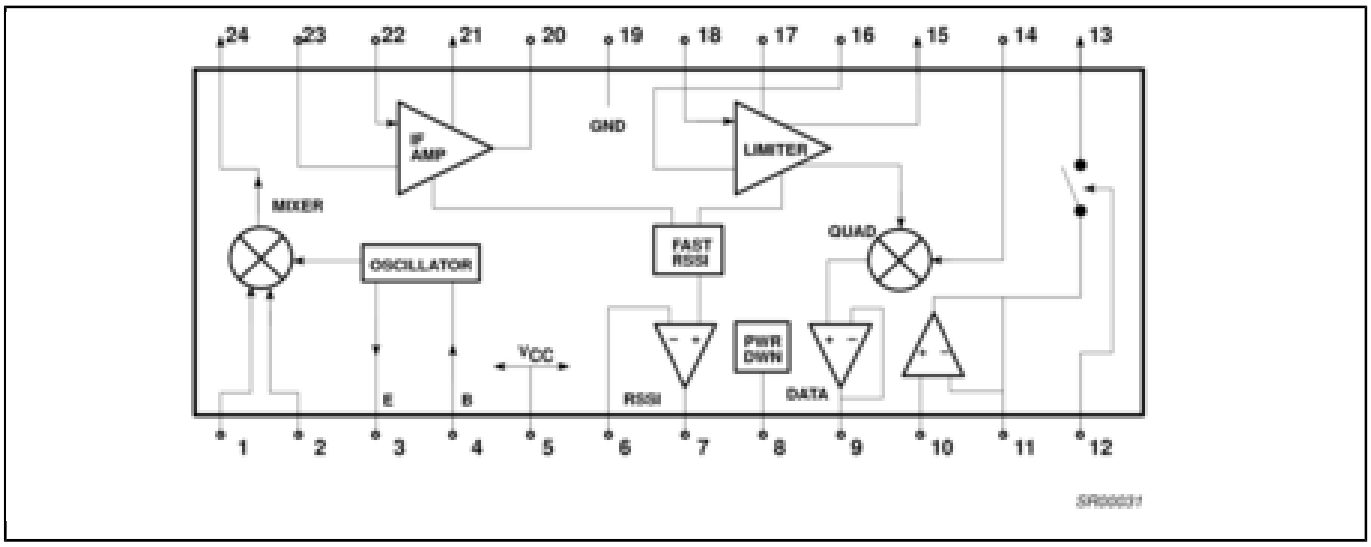
The SA639 is a low-voltage high performance monolithic FM IF system with high-speed RSSI incorporating a mixer/oscillator, two wideband limiting intermediate frequency amplifiers, quadrature detector, logarithmic Received Signal Strength Indicator (RSSI), fast RSSI op amps, voltage regulator, wideband data output, post detection filter amplifier and data switch. The SA639 is available in 24-lead TSSOP (Thin Shrink Small Outline Package).

The SA639 was designed for high-bandwidth portable communication applications and functions down to 2.7 V. The RF section is similar to the famous NE605. The data output provides a minimum bandwidth of 1 MHz to demodulate wideband data. The RSSI output is amplified and has access to the feedback pin. This enables the designer to level adjust the outputs or add filtering.

The post-detection amplifier may be used to realize a low-pass filter function. A programmable data switch routes a portion of the data signal to an external integration circuit that generates a data comparator reference voltage.

SA639 incorporates a Power-down mode which powers down the device when pin 8 (POWER_DOWN_CTRL) is HIGH. Power down logic levels are CMOS and TTL compatible with high input impedance.

SA639DH Block Diagram Block Diagram



View additional information for Low-Voltage Mixer FM IF System with Filter Amplifier and Data Switch.

Note: The information on this document is subject to change without notice.