



DESCRIPTION

The TDH9903 is a low power super-heterodyne OOK/ASK receiver for the 315/434 MHz frequency bands. It offers a high level of integration and requires only few external components. The TDH9903 consists of a low-noise amplifier (LNA), a down-conversion mixer, an on-chip phase-locked loop (PLL) with integrated voltage-controlled oscillator (VCO) and loop filter, an OOK/ASK demodulator, a data filter, a data slicing comparator and an on-chip regulator.

The TDH9903 is available in 4-pin SOP package and is specified over the extended temperature range (-40 to +85°C).

FEATURES

- Ultra-low power consumption: 2.7 mA for fully operation (315 MHz)
- Few external components
- Excellent Sensitivity of the order of -110 dBm (peak ASK signal level at 315 MHz)
- Supply voltage range from 2.4 V to 5.5 V
- 250 MHz to 500 MHz frequency range
- Data rate up to 10 Kb/s

APPLICATIONS

- Automotive Remote Keyless Entry (RKE)
- Remote Control
- Garage door and gate openers
- Suitable for circuit applications that meet either the European ETSI-300-220 or the North American FCC (Part 15) regulatory standards

BLOCK DIAGRAM

