



## RF Detector 100MHz to 2500MHz 0dBm 8-Pin uMAX

Manufacturer: Maxim Integrated

Package/Case: MSOP8

**Product Type:** RF Integrated Circuits

Lifecycle: Obsolete



Images are for reference only

Inquiry

## **General Description**

The MAX4003 low-cost, low-power logarithmic amplifier is designed to detect the power levels of RF power amplifiers (PAs) operating from 100MHz to 2500MHz. A typical dynamic range of 45dB makes this logarithmic amplifier useful in a variety of wireless applications including cellular handset PA control, TSSI for wireless terminal devices, and other transmitter power measurements. This logarithmic amplifier provides much wider measurement range and superior accuracy than typical diode-based detectors. Excellent temperature stability is achieved over the full operating range of -40°C to +85°C. The MAX4003 logarithmic amplifier is a voltage-measuring device with a typical signal range of -58dBV to -13dBV. The input signal is internally AC-coupled by an on-chip 5pF capacitor in series with a  $2k\Omega$  resistance. This highpass coupling, with a corner at 16MHz, sets the lowest operating frequency and allows the input signal source to be DC grounded. The MAX4003 also features a power-on delay, which holds the detector output (OUT) low for approximately 5 $\mu$ s to ensure glitchless controller output. The MAX4003 is available in an 8-bump chip-scale package (UCSP), an 8-pin  $\mu$ MAX package, and an 8-pin thin QFN package. The device consumes 5.9mA with a 3.0V supply and only 13 $\mu$ A when the device is in shutdown.

<b>Key Features</b>	Application
CC	Cellular Handsets (TDMA, CDMA, GPRS, GSM)
	RSSI for Fiber Modules
	Transmitter Power Measurement and Control
	TSSI for Wireless Terminal Devices

## **Recommended For You**

MAX2309EGI MAX2021EIX MAX2150EII

Maxim Integrated Maxim Integrated Maxim Integrated Maxim Integrated

QFN QFN

MAX2608EUT MAX2829EIN+ MAX2606EUT

Maxim Integrated Maxim Integrated Maxim Integrated

SOT23-6 QFN56 SOT23-6

MAX2015EUA+ MAX2051EIP+ MAX41461GUB+

Maxim Integrated Maxim Integrated Maxim Integrated Maxim Integrated

MSOP8 QFN-52 MSOP10

MAX2769ETI+T MAX4003EUA+T MAX1473EUI

Maxim Integrated Maxim Integrated Maxim Integrated

QFN28 MSOP8 TSSOP28

MAX2674EWT+T MAX4003EUA+ MAX2659ELT+T

Maxim Integrated Maxim Integrated Maxim Integrated

6WLP MSOP8 UDFN-6