



## RF Detector 10MHz to 4000MHz 12dBm 24-Pin QFN EP T/R

Manufacturer: Analog Devices, Inc

Package/Case: VQFN

**Product Type:** RF Integrated Circuits

RoHS: RoHS Compliant/Lead free

Lifecycle: Obsolete



Images are for reference only

Inquiry

## **General Description**

The HMC601LP4(E) Logarithmic Detector/Controller converts RF signals at its input, to a proportional DC voltage at its output. The HMC601LP4(E) employ a successive compression topology which delivers extremely high dynamic range and conversion accuracy over a wide input frequency range. As the input power is increased, successive amplifiers move into saturation one by one creating an accurate approximation of the logarithm function.

The output of a series of square law detectors is summed, converted into voltage domain and buffered to drive the LOGOUT output. For detection mode, the LOGOUT pin is shorted to the VSET input, and will provide a nominal logarithmic slope of 19mV/dB and an intercept of -100 dBm. The HMC601LP4(E) can also be used in the controller mode where an external voltage is applied to the VSET pin, to create an AGC or APC feedback loop. The HMC601LP4(E) provides a 15/34ns (rise/fall time) response time enabling RF burst detection to a pulse rate beyond 20 MHz.

Key Features Application

Wide Dynamic Range: up to 75 dB Cellular/PCS/3G

Fast Pulse Response: 15/34ns (Rise/Fall Time) WiMAX, WiBro & Fixed Wireless

Flexible Supply Voltage:+2.7V to +5.5V

Power Monitoring & Control Circuitry

Receiver Signal Strength Indication (RSSI)

4x4mm Leadless SMT Package Automatic Gain & Power Control Circuits

## **Recommended For You**

Excellent Stability over Temperature

Power-Down Mode

HMC624ALP4E HMC952ALP5GE HMC361S8GE

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

QFN24 QFN SOP-8

HMC253AQS24E

Analog Devices, Inc

QFN

HMC346MS8G

Analog Devices, Inc

MSOP8

HMC1119LP4ME

Analog Devices, Inc

QFN

HMC659LC5

Analog Devices, Inc

QFN

HMC909LP4E

Analog Devices, Inc

QFN

HMC564LC4

Analog Devices, Inc

QFN

HMC1021LP4E

Analog Devices, Inc

QFN

HMC241AQS16E

Analog Devices, Inc

SSOP16

HMC424LP3E

Analog Devices, Inc

QFN

HMC662LP3E

Analog Devices, Inc

QFN

HMC8038LP4CE

Analog Devices, Inc

QFN16

HMC363S8G

Analog Devices, Inc

SOP8