

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

Manufacturer:	Analog Devices, Inc.
Package/Case:	QFN
Product Type:	RF Integrated Circuits
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.

Application

Key	<b>Features</b>
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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
Power-Down Mode	
Excellent Stability over Temperature	Receiver Signal Strength Indication (RSSI)
4x4mm Leadless SMT Package	Automatic Gain & Power Control Circuits

#### **Recommended For You**

HMC624ALP4E	HMC952ALP5GE	HMC361S8GE
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
QFN24	QFN	SOP-8

### HMC253AQS24E

Analog Devices, Inc

QFN

# HMC659LC5

Analog Devices, Inc QFN

# HMC1021LP4E

Analog Devices, Inc QFN

# HMC662LP3E

Analog Devices, Inc

QFN

#### HMC346MS8G

Analog Devices, Inc MSOP8

HMC909LP4E Analog Devices, Inc QFN

HMC241AQS16E

# Analog Devices, Inc SSOP16

HMC8038LP4CE

Analog Devices, Inc QFN16

#### HMC1119LP4ME

Analog Devices, Inc QFN

HMC564LC4

Analog Devices, Inc QFN

# HMC424LP3E

Analog Devices, Inc QFN

## HMC363S8G

Analog Devices, Inc SOP8