

RF Detector 1MHz to 8000MHz 24-Pin QFN EP T/R

Manufacturer:	Analog Devices, Inc.
Package/Case:	QFN24
Product Type:	RF Integrated Circuits
RoHS:	RoHS Compliant/Lead free RoHS
Lifecycle:	Obsolete



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General Description

The HMC602LP4(E) Logarithmic Detector/Controller converts RF signals at its input, to a proportional DC voltage at its output. The HMC602LP4(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 -25mV/ dB and an intercept of 18 dBm (23 dBm for $f \ge 5.8$ GHz). The HMC602LP4(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.

Key Features

±1dB with 60dB Range up to 6GHz high accuracy

10ns Output response time

Power-down mode

Excellent stability over temperature

Buffered temperature sensor output

Recommended For You

HMC624ALP4E

Analog Devices, Inc QFN24 HMC952ALP5GE Analog Devices, Inc QFN

Application

RF Communications, Wireless, Motor Drive & Control, Automotive

HMC361S8GE

Analog Devices, Inc 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