
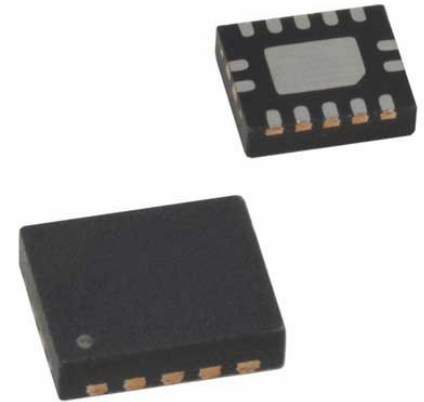


Power Detector 24-Pin QFN EP T/R

| | |
|----------------------|--|
| Manufacturer: | Analog Devices, Inc |
| Package/Case: | 24-LeadQFN(4mmx4mmwE |
| Product Type: | RF Integrated Circuits |
| RoHS: | RoHS Compliant/Lead free  |
| Lifecycle: | Active |



Images are for reference only

[Inquiry](#)

General Description

The HMC1120 is an RMS power detector with an integrated high bandwidth envelope detector. The RMS output is a temperature compensated, monotonic, linear-in-dB representation of real RF signal power, measured over an input sensing range of 70 dB. The envelope detector provides an accurate voltage output which is linearly proportional to the amplitude envelope of the RF input signal for modulation bandwidths up to 150 MHz. The high bandwidth envelope detection of the HMC1120 makes it ideal for detecting broadband and high crest factor RF signals commonly used in GSM, WCDMA, and LTE systems. Additionally, the instantaneous envelope output can be used to create fast, excessive RF power protection, PA linearization, and efficiency enhancing envelope-tracking PA implementations.

The HMC1120's RMS detector integration bandwidth is digitally programmable via input pins SC11-4 over a range of more than 4 decades. This allows the user to dynamically set the operation bandwidth and also permits the detection of different types of modulations on the same platform.

The HMC1120 features an internal op-amp at the RMS output stage, which accommodates slope and intercept adjustments and supports a wide range of applications.

Key Features

- Broadband Single-Ended RF Input
- RMS Detector with ± 1 dB Detection Accuracy to 3.9 GHz
- Input Dynamic Range: -60 dBm to +8 dBm
- Envelope Detection Bandwidth > 150 MHz
- Digitally Programmable Integration Bandwidth
- Power-Down Mode
- 24 Lead 4x4mm SMT Package: 16mm²
- Envelope Tracking Power-Down Mode

Application

- Log \rightarrow Root-Mean-Square (RMS) Conversion
- Tx/Rx Signal Strength Indication (TSSI / RSSI)
- RF Power Amplifier Efficiency Control
- Receiver Automatic Gain Control
- Transmitter Power Control
- Envelope Tracking
- PA Linearization

Recommended For You

HMC624ALP4E

Analog Devices, Inc
QFN24

HMC952ALP5GE

Analog Devices, Inc
QFN

HMC361S8GE

Analog Devices, Inc
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