

HMC1020LP4ETR

RF Detector 100MHz to 3900MHz 7dBm 24-Pin QFN EP T/R

Manufacturer: Analog Devices, Inc

Package/Case: QFN

Product Type: RF Integrated Circuits

RoHS: RoHS Compliant/Lead free

Lifecycle: Obsolete



Images are for reference only

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General Description

The HMC1020LP4E Power Detector is designed for RF power measurement and control applications for frequencies up to 3.9 GHz. The detector provides an accurate RMS representation of any broadband, single-ended RF/IF input signal. The output is a temperature compensated, monotonic representation of real signal power, measured with an input sensing range of 72 dB.

The HMC1020LP4E is ideally suited to those wide bandwidth, wide dynamic range applications requiring repeatable measurement of real signal power, especially where RF/IF wave shape and/or crest factor change with time.

The integration bandwidth of the HMC1020LP4E is digitally programmable with the use of input pins SCI1-4 over a range of more than 3 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.

HMC1020LP4E features an internal op-amp at output stage, which provides for slope / intercept adjustments and enables controller application.

Typical Applications

Log -> Root-Mean-Square(RMS) Conversion Tx/Rx Signal StrengthIndication (TSSI / RSSI) RF Power Amplifier Efficiency Control Receiver Automatic Gain Control Transmitter Power Control

Key Features

Broadband Single-Ended RF Input

Input Dynamic Range:-65 dBm to +7 dBm

RF Signal Wave Shape& Crest Factor Independent

Digitally ProgrammableIntegration Bandwidth

Excellent Temperature Stability

Power-Down Mode

24 Lead 4x4mm SMT Package: 16mm²

Application

Log -> Root-Mean-Square(RMS) Conversion

Tx/Rx Signal StrengthIndication (TSSI / RSSI)

RF Power Amplifier Efficiency Control

Receiver Automatic Gain Control

Transmitter Power Control

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