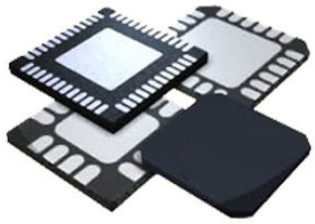
HMC1030LP5E

RF Detector 0MHz to 3900MHz 32-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

Inquiry

General Description

The HMC1030LP5E is a dual-channel RMS power detector designed for high accuracy RF power signal measurement and control applications over the 0.1 to 3.9 GHz frequency range. The device can be used with input signals having RMS values from -60 dBm to +10 dBm referenced to 50 Ohm and large crest factors with no accuracy degradation.

Each RMS detection channel is fully specified for operation up to 3.9 GHz, over a wide dynamic range of 70 dB. The HMC1030LP5E operates from a single +5V supply and provides two linear-in-dB detection outputs at the RMSA and RMSB pins with scaled slopes of 37 mV/dB. The RMSA and RMSB channel outputs provide RMS detection performance in terms of dynamic range, logarithmic linearity and temperature stability similar to Hittite's HMC1021LP4E RMS Detector. The RMSA and RMSB outputs provide a read of average input signal power, or true-RMS power. Frequency detection up to 3.9 GHz is possible, with excellent channel matching of less than 1 dB, over a wide range of input frequencies and with low temperature drift.

Key Features

Crest Factor (Peak-to-Average Power Ratio) Measurement

Input Dynamic Range: -55 dBm to +15 dBm

RF Signal Wave Shape & Crest Factor Independent

Excellent Temperature Stability

Power-Down Mode

32 Lead 5 x 5 mm SMT Package: 25 mm²

Application

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

Tx/Rx Signal StrengthIndication (TSSI / RSSI)

Antenna VSWR Monitor

Receiver Automatic Gain Control

Transmitter Power Control

Recommended For You

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