


Linear RMS Power Detector 6-Pin DSBGA T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	DSBGA-6
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The LMH2120 is a 40 dB Linear RMS power detector particularly suited for accurate power measurement of modulated RF signals that exhibit large peak-to-average ratios, i.e, large variations of the signal envelope. Such signals are encountered in W-CDMA and LTE cell phones. The RMS measurement topology inherently ensures a modulation insensitive measurement.

The device has an RF frequency range from 50 MHz to 6 GHz. It provides an accurate, temperature and supply insensitive, output voltage that relates linearly to the RF input power in volt. The LMH2120's excellent conformance to a linear response enables an easy integration by using slope and intercept only, reducing calibration effort significantly. The device operates with a single supply from 2.7V to 5V. The LMH2120 has an RF power detection range from -35 dBm to 5 dBm and is ideally suited for use in combination with a directional coupler. Alternatively, a resistive divider can be used.

The device is active for EN = High, otherwise it is in a low power consumption shutdown mode. To save power and prevent discharge of an external filter capacitance, the output (OUT) is high impedance during shutdown.

The LMH2120 power detector is offered in a tiny 6-bump DSBGA package.

Key Features

Linear root mean square response

40dB Linear-in-V power detection range

Multi-band operation from 50MHz to 6GHz

Lin conformance better than ± 0.5 dB

Highly temperature insensitive

Modulation independent response

Minimal slope and intercept variation

Shutdown functionality

Green product and no Sb/Br



Recommended For You

LMI972M

Texas Instruments, Inc
SOP20

LMI496N

Texas Instruments, Inc
DIP14

LMI971M

Texas Instruments, Inc
SOP-8

LMI871N

Texas Instruments, Inc
DIP18

LMX2541SQE2060E/NOBP

Texas Instruments, Inc
WQFN-36

LMI971MX/NOBP

Texas Instruments, Inc
8-SOIC

LMP91051MI/NOBP

Texas Instruments, Inc
14-TSSOP

LMX2470SLEX/NOBP

Texas Instruments, Inc
QFN

LMH2110TMX/NOBP

Texas Instruments, Inc
DSBGA-6

LMH2110TM/NOBP

Texas Instruments, Inc
DSBGA6

LMV221SD

Texas Instruments, Inc
QFN

LMI496M

Texas Instruments, Inc
SOP14

LMV225SD

Texas Instruments, Inc
WSO6

LMH2110TM

Texas Instruments, Inc
SMD-6

LMI972M/NOBP

Texas Instruments, Inc
SOP20