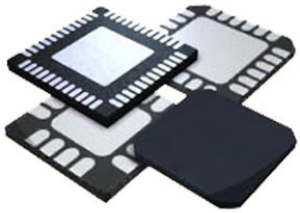
LMV221SD/NOPB

RF Detector 50MHz to 3500MHz -5dBm 6-Pin WSON EP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	QFN
Product Type:	RF Integrated Circuits
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

The LMV221 is a 40-dB RF power detector intended for use in CDMA and WCDMA applications. The device has an RF frequency range from 50 MHz to 3.5 GHz. It provides an accurate temperature and supply-compensated output voltage that relates linearly to the RF input power in dBm. The circuit operates with a single supply from 2.7 V to 3.3 V.

The LMV221 has an RF power detection range from 45 dBm to 5 dBm and is ideally suited for direct use in combination with a 30-dB directional coupler. Additional low-pass filtering of the output signal can be achieved by means of an external resistor and capacitor. shows a detector with an additional output low pass filter. The filter frequency is set with RS and CS.

shows a detector with an additional feedback low pass filter. Resistor RP is optional and lowers the trans-impedance gain (RTRANS). The filter frequency is set with CP//CTRANS and RP//RTRANS.

The device is active for Enable = 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.

For all available packages, see the orderable addendum at the end of the data sheet.

Key Features

2.7-V to 3.3-V Supply Voltage

40-dB Linear in dB Power Detection Range

0.3-V to 2-V Output Voltage Range

Shutdown

Multi-Band Operation from 50 MHz to 3.5 GHz

0.5-dB Accurate Temperature Compensation

External Configurable Output Filter Bandwidth

2.5 mm × 2.2 mm × 0.8 mm 6-pin WSON Package

Description

The LMV221 is a 40-dB RF power detector intended for use in CDMA and WCDMA applications. The device has an RF frequency range from 50 MHz to 3.5 GHz. It provides an accurate temperature and supply-compensated output voltage that relates linearly to the RF input power in dBm. The circuit operates with a single supply from 2.7 V to 3.3 V.

The LMV221 has an RF power detection range from ?45 dBm to ?5 dBm and is ideally suited for direct use in combination with a 30-dB directional coupler. Additional low-pass filtering of the output signal can be achieved by means of an external resistor and capacitor. shows a detector with an additional output low pass filter. The filter frequency is set with RS and CS.

shows a detector with an additional feedback low pass filter. Resistor RP is optional and lowers the trans-impedance gain (RTRANS). The filter frequency is set with CP//CTRANS and RP//RTRANS.

The device is active for Enable = 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.

For all available packages, see the orderable addendum at the end of the data sheet.

Recommended For You

LM1972M

Texas Instruments, Inc

SOP20

LM1496N

Texas Instruments, Inc

DIP14

LM1971M

Texas Instruments, Inc

SOP-8

LM1871N

Texas Instruments, Inc

DIP18

LMH2120UM/NOPB

Texas Instruments, Inc

DSBGA-6

LMX2541SQE2060E/NOPB

Texas Instruments, Inc

WQFN-36

LM1971MX/NOPB

Texas Instruments, Inc

8-SOIC

LMP91051MT/NOPB

Texas Instruments, Inc

14-TSSOP

LMX2470SLEX/NOPB

Texas Instruments, Inc

QFN

LMH2110TMX/NOPB

Texas Instruments, Inc

DSBGA-6

LMH2110TM/NOPB

Texas Instruments, Inc

DSBGA6

LMV221SD

Texas Instruments, Inc

QFN

LM1496M

Texas Instruments, Inc

SOP14

LMV225SD

Texas Instruments, Inc

WSON6

LMH2110TM

Texas Instruments, Inc

SMD-6