

## **AD8313ARM**

Data Sheet

0.1 GHz-2.5 GHz, 70 dB Logarithmic Detector/Controller

Manufacturers Analog Devices, Inc

Package/Case MSOP-8

Product Type RF Detectors

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for AD8313ARM or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The AD8313 is a complete multistage demodulating logarithmic amplifier that can accurately convert an RF signal at its input to an equivalent decibel-scaled value at its dc output. The AD8313 maintains a high degree of log conformance for signal frequencies from 0.1 GHz to 2.5 GHz. Application is straightforward, requiring only a single supply of 2.7 V to 5.5 V and the addition of a suitable input and supply decoupling. Operating on a 3 V supply, its 13.7 mA consumption (for>

The AD8313 is fabricated on Analog Devices, Inc., advanced 25 GHz silicon bipolar IC process and is available in an 8-lead MSOP package. The operating temperature range is  $-40^{\circ}$ C to  $+85^{\circ}$ C.

## **Features**

Wide bandwidth: 0.1 GHz to 2.5 GHz min

High dynamic range: 70 dB to  $\pm 3.0 \ dB$ 

High accuracy: ±1.0 dB over 65 dB range (@ 1.9 GHz)

Fast response: 40 ns full-scale typical

Controller mode with error output

Scaling stable over supply and temperature

Wide supply range: 2.7 V to 5.5 V

Low power: 40 mW at 3 V

Power-down feature: 60 mW at 3 V





## **Related Products**



AD8418BRMZ-RL
Analog Devices, Inc
MSOP-8



ADA4084-2ARMZ
Analog Devices, Inc
MSOP-8



ADA4528-2ARMZ-R7
Analog Devices, Inc
MSOP-8



AD8062ARMZ
Analog Devices, Inc
MSOP8



AD8567ARUZ
Analog Devices, Inc
TSSOP-14



Analog Devices, Inc SOP23

AD8628AUJZ



AD8022ARMZ
Analog Devices, Inc
MSOP-8



AD8041AR
Analog Devices, Inc
SOP-8