

54 dB, LOGARITHMIC DETECTOR, 1

Manufacturers	Analog Devices, Inc
Package/Case	LP3
Product Type	RF Integrated Circuits
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for HMC948LP3E or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The HMC948LP3E Logarithmic Detector converts RF signals at its input, to a proportional DC voltage at its output. The HMC948LP3E employs successive compression topology which delivers high dynamic range over a wide input frequency range. As the input power is increased, successive amplifiers move into saturation one by one creating an approximation of the logarithm function.

The output of a series of square law detectors is summed, converted into the voltage domain and buffered to drive the LOG OUT output. The HMC948LP3E provides a nominal logarithmic slope of +14.2 mV/dB and an intercept of -111 dBm at 23 GHz. Ideal as a log detector for high volume microwave radio and VSAT applications, the HMC948LP3E is housed in a compact 3x3 mm RoHS compliant SMT plastic package.

Features

- Wide Input Bandwidth: 1 to 23 GHz
- Wide Dynamic Range: 54 dB up to 23 GHz
- Single Positive Supply: +3.3V
- Excellent Stability Over Temperature
- Fast Rise / Fall Time: 5 / 7 ns
- 16 Lead 3x3mm SMT Package: 9mm²

Application

- Point-to-Point Microwave Radio
- VSAT
- Wideband Power Monitoring
- Receiver Signal Strength Indication (RSSI)
- Test & Measurement



Related Products



[HMC3653LP3BE](#)

Analog Devices, Inc
QFN-12



[HMC253AQS24](#)

Analog Devices, Inc
24-SSOP (0.154, 3.90mm Width)



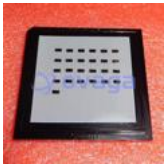
[HMC441LP3E](#)

Analog Devices, Inc
QFN-16



[HMC358MS8GE](#)

Analog Devices, Inc
MSOP-8



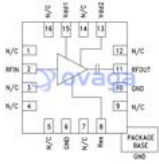
HMC490

Analog Devices, Inc
SMD



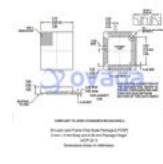
HMC453ST89E

Analog Devices, Inc
ST89E



HMC618ALP3E

Analog Devices, Inc
QFN-16



HMC463LP5E

Analog Devices, Inc
QFN-32