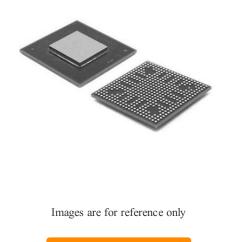


## RF Amp Single LNA 11GHz 6V 6-Pin LFCSP EP Cut Tape

| Manufacturer: | Analog Devices, Inc.           |
|---------------|--------------------------------|
| Package/Case: | LFCSP-6                        |
| Product Type: | Amplifier ICs                  |
| RoHS:         | RoHS Compliant/Lead free Works |
| Lifecycle:    | Active                         |



# **General Description**

The HMC8412 is a gallium arsenide (GaAs), monolithic microwave integrated circuit (MMIC), pseudomorphic high electron mobility transistor (pHEMT), low noise wideband amplifier that operates from 0.4 GHz to 11 GHz.

The HMC8412 provides a typical gain of 15.5 dB, a 1.4 dB typical noise figure, and a typical output third-order intercept (OIP3) of  $\leq$ 33 dBm, requiring only 60 mA from a 5 V drain supply voltage. The saturated output power (PSAT) of  $\leq$ 20.5 dBm typical enables the low noise amplifier (LNA) to function as a local oscillator (LO) driver for many Analog Devices, Inc., balanced, inphase and quadrature (I/Q) or image rejection mixers.

The HMC8412 also features inputs and outputs that are internally matched to 50  $\Omega$ , making the device ideal for surface-mount technology (SMT)-based, high capacity microwave radio applications.

The HMC8412 is housed in an RoHS-compliant, 2 mm  $\times$  2 mm, 6-lead LFCSP.

## APPLICATIONS

| Key Features                                     | Application   |
|--|---|
| Low noise figure: 1.4 dB typical                 | Test instrumentation                                |
| Single positive supply (self biased)             | Telecommunications                                  |
| High gain: $\leq 15.5$ dB typical                | Military radar and communication Electronic warfare |
| High OIP3: ≤33 dBm typical                       | Minitary radar and communication Electronic warrare |
| RoHS-compliant, 2 mm $\times$ 2 mm, 6-lead LFCSP | Aerospace   |
| Download the HMC8412TCPZ-EP data sheet (pdf)     |   |
| Military temperature range (-55°C to +125°C)     |   |
| Controlled manufacturing baseline                |   |
| 1 assembly/test site                             |   |
| 1 fabrication site                               |   |
| Product change notification                      |   |
| Qualification data available on request          |   |
| V62/21602 DSCC Drawing Number                    |   |
|  |   |

## **Recommended For You**

#### HMC624ALP4E

Analog Devices, Inc QFN24

HMC253AQS24E Analog Devices, Inc

QFN

HMC659LC5 Analog Devices, Inc QFN

Analog Devices, Inc QFN

HMC1021LP4E

HMC952ALP5GE Analog Devices, Inc QFN

HMC346MS8G Analog Devices, Inc MSOP8

HMC909LP4E Analog Devices, Inc QFN

HMC241AQS16E Analog Devices, Inc SSOP16

### HMC361S8GE

Analog Devices, Inc SOP-8

## HMC1119LP4ME

Analog Devices, Inc QFN

HMC564LC4 Analog Devices, Inc

QFN

HMC424LP3E

Analog Devices, Inc QFN

# HMC662LP3E

Analog Devices, Inc

QFN

HMC8038LP4CE

Analog Devices, Inc

HMC363S8G

Analog Devices, Inc SOP8

QFN16