

## HMC524ALC3B

Data Sheet

Up/Down Conv Mixer 32GHz 12-Pin CQFN EP T/R

Manufacturers	Analog Devices, Inc	24
Package/Case	LCC-12	and the second se
Product Type	RF Integrated Circuits	Canadanan and
RoHS	Pb-free Halide free	
Lifecycle		Images are for reference only
Please submit RFQ for HMC524ALC3B or Email to us: sales@oyaga.com We will contact you in 12 hours.		

## **General Description**

The HMC524ALC3B is a compact gallium arsenide (GaAs), monolithic microwave integrated circuit (MMIC), in phase quadrature (I/Q) mixer in a leadless RoHS compliant surface-mount (SMT) ceramic package. This device can be used as either an image reject mixer or a single-sideband upconverter. The mixer uses two standard, double balanced mixer cells and a 90° hybrid coupler fabricated in a GaAs, metal-semiconductor field effect transistor (MESFET) process. A low frequency quadrature hybrid produces a 100 MHz IF output.

This device is a much smaller alternative to hybrid style image reject mixers and single-sideband upconverter assemblies. The HMC524ALC3B eliminates the need for wire bonding, allowing use of surface-mount manufacturing techniques.

## Features

Passive: no dc bias required

Conversion loss: 9 dB (typical)

Image rejection: 20 dB (typical)

- LO to RF isolation: 35 dB (typical)
- LO to IF isolation: 25 dB (typical)

IP3: 18 dBm (typical)

P1dB: 17 dBm (typical)

IF pin frequency: dc - 4.5 GHz

12-lead, 3 mm  $\times$  3 mm SMT ceramic package

#### **Related Products**



HMC3653LP3BE

Analog Devices, Inc QFN-12

HMC253AQS24

Analog Devices, Inc

24-SSOP (0.154, 3.90mm Width)

## HMC358MS8GE

Analog Devices, Inc MSOP-8

# HMC453ST89E

Analog Devices, Inc ST89E

## Application

Point to point radios

Point to multipoint radios and VSAT

Test equipment and sensors

Military end use



#### HMC441LP3E

Analog Devices, Inc QFN-16

#### HMC948LP3E

Analog Devices, Inc LP3



## **HMC490**

Analog Devices, Inc SMD

### HMC618ALP3E

Analog Devices, Inc **QFN-16**