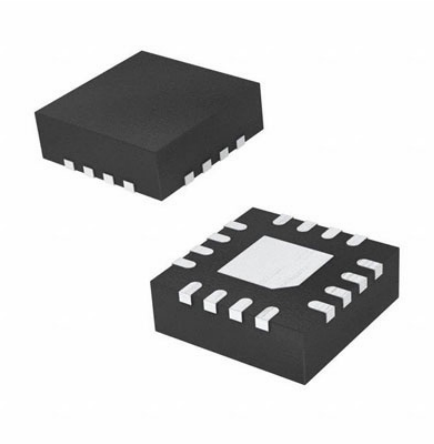
HMC977LP4E

Data Sheet

Up/Down Conv Mixer 28GHz 24-Pin QFN EP Reel

Manufacturers	Analog Devices, Inc
Package/Case	24-VFQFN
Product Type	RF Mixers ; I/Q Downconverters/Receivers
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for HMC977LP4E or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The HMC977 is a compact, gallium arsenide (GaAs), monolithic microwave integrated circuit (MMIC), inphase and quadrature (I/Q) downconverter in a leadless, RoHS compliant, surface-mount technology (SMT) package. This device provides a small signal conversion gain of 14 dB with a noise figure of 2.5 dB and 21 dBc of image rejection. The HMC977 utilizes a low noise amplifier (LNA) followed by an image reject mixer which is driven by an active 2× multiplier. The image reject mixer eliminates the need for a filter following the LNA and removes thermal noise at the image frequency. I and Q mixer outputs are provided and an external 90° hybrid is required to select the required sideband. The HMC977 is a much smaller alternative to hybrid style image reject mixer downconverter assemblies and is compatible with surface-mount manufacturing techniques.

Features

Conversion gain: 14 dB typical

Image rejection: 21 dBc typical at 20 GHz to 26.5 GHz

2× LO to RF isolation: 45 dB typical at 20 GHz to 26.5 GHz

Noise figure: 2.5 dB typical at 20 GHz to 26.5 GHz

Input IP3: 1 dBm typical at 20 GHz to 26.5 GHz

LO drive range: 2 dBm to 6 dBm

24-lead 4 mm × 4 mm LFCSP

Application

Point to point and point to multipoint radios

Military radar, electronic warfare (EW), and electronic intelligence (ELINT)

Satellite communications

Related Products

HMC3653LP3BE

Analog Devices, Inc

QFN-12

HMC441LP3E

Analog Devices, Inc

QFN-16

HMC253AQS24

Analog Devices, Inc

24-SSOP (0.154, 3.90mm Width)

HMC948LP3E

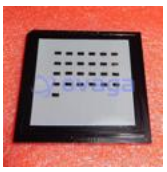
Analog Devices, Inc

LP3

HMC358MS8GE

Analog Devices, Inc

MSOP-8



HMC490

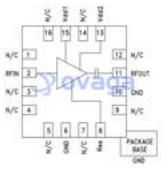
Analog Devices, Inc

SMD

HMC453ST89E

Analog Devices, Inc

ST89E



HMC618ALP3E

Analog Devices, Inc

QFN-16