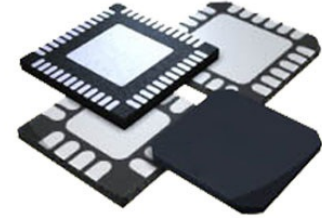


## Up/Down Conv Mixer 10GHz 24-Pin CLLCC EP T/R



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Analog Devices, Inc](#)

**Package/Case:** QFN

**Product Type:** RF Integrated Circuits

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The HMC520A is a compact gallium arsenide (GaAs), monolithic microwave integrated circuit (MMIC), in-phase quadrature (I/Q) mixer in a 24-terminal, RoHS compliant, ceramic leadless chip carrier (LCC) package. The 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 fabricated in a GaAs, metal semiconductor field effect transistor (MESFET) process. The HMC520A is a much smaller alternative to a hybrid style image reject mixer and a single sideband upconverter assembly. The HMC520A eliminates the need for wire bonding, allowing the use of surface-mount manufacturing techniques.

### Key Features

Radio frequency (RF) range: 6 GHz to 10 GHz

Local oscillator (LO) input frequency range: 6 GHz to 10 GHz

Conversion loss: 8 dB typical at 6 GHz to 10 GHz

Image rejection: 23 dBc typical at 6 GHz to 10 GHz

LO to RF isolation: 43 dB typical

LO to intermediate frequency (IF) isolation: 25 dB typical

Input third-order intercept (IP3): 19 dBm typical

Input power for 1 dB compression (P1dB): 10 dBm typical at 7.1 GHz to 8.5 GHz

Wide IF frequency range: DC to 3.5 GHz

24-terminal, 4 mm × 4 mm, ceramic leadless chip carrier

### Application

Point to point microwave radios

Point to multipoint radios

Video satellites (VSATs)

Digital radios

Instrumentation

Automatic test equipment (ATE)

### Recommended For You

**HMC624ALP4E**

Analog Devices, Inc  
QFN24

**HMC952ALP5GE**

Analog Devices, Inc  
QFN

**HMC361S8GE**

Analog Devices, Inc  
SOP-8

**HMC253AQS24E**

Analog Devices, Inc  
QFN

**HMC346MS8G**

Analog Devices, Inc  
MSOP8

**HMC1119LP4ME**

Analog Devices, Inc  
QFN

**HMC659LC5**

Analog Devices, Inc  
QFN

**HMC909LP4E**

Analog Devices, Inc  
QFN

**HMC564LC4**

Analog Devices, Inc  
QFN

**HMC1021LP4E**

Analog Devices, Inc  
QFN

**HMC241AQS16E**

Analog Devices, Inc  
SSOP16

**HMC424LP3E**

Analog Devices, Inc  
QFN

**HMC662LP3E**

Analog Devices, Inc  
QFN

**HMC8038LP4CE**

Analog Devices, Inc  
QFN16

**HMC363S8G**

Analog Devices, Inc  
SOP8