



Data Sheet

7 GHz to 40 GHz, GaAs, MMIC, Double Balanced Mixer

Manufacturers

Analog Devices, Inc

Package/Case

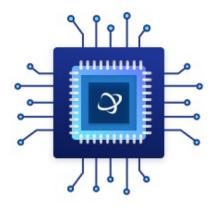
CHIPS OR DIE

Product Type

RF Integrated Circuits

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for HMC774A or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The HMC774A is a general-purpose, gallium arsenide (GaAs), monolithic microwave integrated circuit (MMIC), double balanced mixer chip that can be used as an upconverter or downconverter from 7 GHz to 40 GHz. This mixer requires no external components or matching circuitry.

The HMC774A provides excellent local oscillator (LO) to radio frequency (RF) and LO to intermediate frequency (IF) suppression due to optimized balun structures. The mixer operates well with LO drive levels of 13 dBm. The HMC774A is also available in surface-mount technology format as the HMC774ALC3B.

Features

Downconverter

Conversion loss

10.5 dB typical for 7 GHz to 22 GHz

11 dB typical for 22 GHz to 40 GHz

LO to RF isolation

34 dB typical for 7 GHz to 22 GHz

32 dB typical for 22 GHz to 40 GHz

LO to IF isolation

32 dB typical for 7 GHz to 22 GHz

50 dB typical for 22 GHz to 40 GHz

RF to IF isolation

14 dB typical for 7 GHz to 22 GHz

29 dB typical for 22 GHz to 40 GHz

IP3: 20 dBm typical

IP2: 40 dBm typical

Input power for P1dB

11 dBm typical for 7 GHz to 22 GHz

12 dBm typical for 22 GHz to 40 GHz

IF frequency range: dc to 10

Passive, no dc bias required

Small size: $1.38 \text{ mm} \times 0.81 \text{ mm} \times 0.102 \text{ mm}$

Application

Point to point radios

Point to multipoint radios and very small aperture terminals (VSATs)

Test equipment and sensors

Military end use

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



HMC453ST89E

Analog Devices, Inc ST89E



HMC490

Analog Devices, Inc SMD



HMC618ALP3E

Analog Devices, Inc QFN-16