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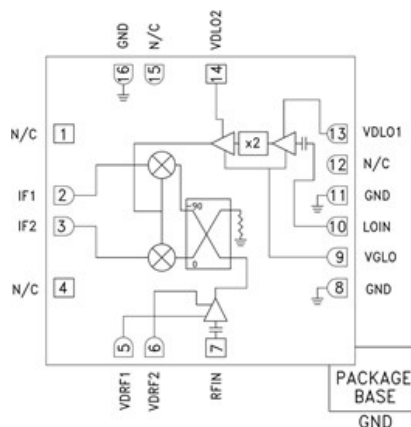
HMC6147A HMC6147A

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HMC6147A

GaAs MMIC I/Q Downconverter, 37 - 44 GHz

Recommended for New Designs



Data Sheet

View All

Features and Benefits

- Conversion Gain: 13 dB
- Excellent Image Rejection: 25 dBc
- Output IP3: +12 dBm
- High Output IP3: +27 dBm
- 16 Lead 5x5 mm Ceramic Package: 25 mm²

Product Categories

RF & Microwave

- I/Q Downconverters/Receivers

Product Details

The HMC6147ALC5A is a compact GaAs MMIC I/Q downconverter in a leadless RoHS compliant SMT package. This device provides a small signal conversion gain of 13 dB with 25 dBc of sideband rejection. The HMC6147ALC5A utilizes a low noise amplifier to drive the I/Q mixer where the LO is driven by a

F2 mixer inputs are provided and an external 90° hybrid is

needed to select the required sideband.

The I/Q mixer topology reduces the need for filtering of the unwanted sideband. The HMC 6147ALC5A is a much smaller alternative to hybrid style single sideband converter assemblies and it eliminates the need for wire bonding by allowing the use of surface mount manufacturing techniques.

Applications

- Point-to-Point & ... [Show More..](#)

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Product Lifecycle

Recommended for New Designs

This product has been released to the market. The data sheet contains all final specifications and operating conditions. For new designs, ADI recommends utilization of these products.

Evaluation Kits (1)

EVAL-HMC6147ALC5A

HMC6147ALC5A Evaluation Board

EVAL-HMC6147ALC5A

Product Details

This page contains ordering information for evaluating the HMC6147ALC5A.

[View Detailed Evaluation Kit Information](#)

Resources

- [Land Pattern and Solder Stencil](#) ZIP
- [HMC6147A Gerber Files](#) ZIP

Documentation

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[1 Data Sheets](#)

HMC6147A Data Sheet

PDF

1.14 M

Reference Materials



2 See All

1 Quality Documentation

1 Technical Articles

Quality Documentation

**Package/Assembly
Qualification Test
Report: LC5, LC5A (QTR:
2014-00384 REV: 01)**

Technical Articles

**The Changing
Landscape of Frequency
Mixing Components**

Design Resources



ADI has always placed the highest emphasis on delivering products that meet the maximum levels of quality and reliability. We achieve this by incorporating quality and reliability checks in every scope of product and process design, and in the manufacturing process as well. "Zero defects" for shipped products is always our goal.

[HMC6147A Material Declaration](#)


[PCN-PDN Information](#)

[Quality And Reliability](#)

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Model	Package	Pins	Temp Range	Packing Qty	Price (100-499)	Price (1000+)	RoHS	Order from Analog Devices
HMC6147ALC5A Request PCN/PDN Notification Production	LCC:CER LEADLESS CHIP CARR	16	-40 to 85C	Reel, 50		-	Y Info	Sample Purchase

Model	Package	Pins	Temp Range	Packing Qty	Price (100-499)	Price (1000+)	RoHS	Order from Analog Devices
HMC6147ALC5ATR Request PCN/PDN Notification Production	LCC:CER LEADLESS CHIP CARR	16	-40 to 85C	Reel, 100		-	Y Info	Sample Purchase
HMC6147ALC5ATR-R5 Request PCN/PDN Notification Production	LCC:CER LEADLESS CHIP CARR	16	-40 to 85C	Reel, 500		-	Y Info	Purchase

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[Price Table Help](#)

Evaluation Boards

Pricing displayed is based on 1-piece.

Model	Description	RoHS
EV1HMC6147ALC5A Production	Evaluation Board - EVAL01-HMC6147ALC5A Evaluation PCB	Yes

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