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HMC635LC4 HMC635LC4



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My Analog

HMC635LC4

GaAs PHEMT MMIC Driver Amplifier, 18 - 40 GHz

Production

Overview

Evaluation Kits

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Tools & Simulations

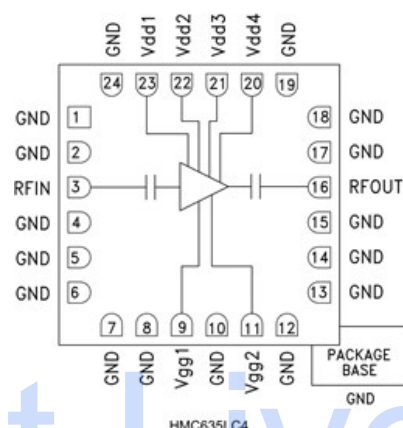
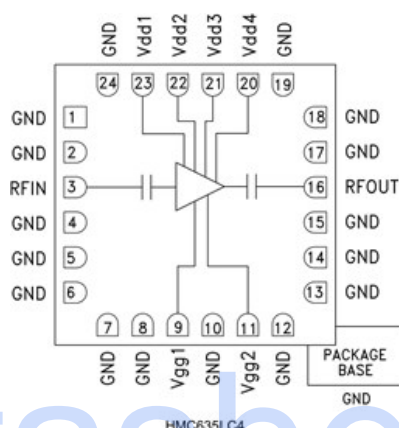
Reference Designs

Reference Materials

Design Resources

Discussions

Sample & Buy



Data Sheet

S-Parameters

View All

View All

Features and Benefits

- Gain: 18.5 dB ^[1]
- P1dB: +22 dBm ^[1]
- Output IP3: +27 dBm
- Saturated Power: +23.5 dBm @ 15% PAE ^[1]
- Supply Voltage: +5V @ 280 mA
- 50 Ohm matched Input / Output
- 24 Lead Ceramic 4x4mm SMT Package: 16mm²

Product Categories

RF & Microwave

- [Wideband Distributed Amplifiers](#)

Product Details

The HMC635LC4 is a GaAs PHEMT MMIC Driver Amplifier die which operates between 18 and 40 GHz. The amplifier provides 18.5 dB of gain, +27 dBm Output IP3, and +22 dBm of output power at 1 dB gain compression, while requiring 280 mA from a +5V supply. Ideal as a driver amplifier for microwave radio applications, or as an LO driver for mixers operating between 18 and 40 GHz, the HMC635LC4 is capable of providing up to +23.5 dBm of saturated output power at 15% PAE. The amplifier's I/Os are DC blocked and internally

matched to 50 Ohms making it ideal for integration into Multi-Chip-Modules (MCMs).

[1] Board loss subtracted out for gain, power and noise figure measurements.

Applications

- Point-to-Point Radios
- Point-to-Multi-Point
- ... [Show More..](#)

Comparable Parts

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Product Lifecycle

Production

At least one model within this product family is in production and available for purchase. The product is appropriate for new designs but newer alternatives may exist.

Evaluation Kits (1)

EVAL-HMC635LC4

HMC635LC4 Evaluation Board

Documentation

5 See All

1 Data Sheets

4 Application Notes

HMC635LC4 Data Sheet

PDF

693.88 K

AN-1363: Meeting Biasing Requirements of Externally Biased RF/Microwave Amplifiers with Active Bias Controllers (Rev. 0)

PDF

804.11 K

MMIC Amplifier Biasing Procedure Application Note

PDF

435.1 K

Broadband Biasing of Amplifiers General Application Note

PDF

433.77 K

Thermal Management for Surface Mount Components General Application Note

PDF

189.99 K

Tools & Simulations

HMC635LC4 S-Parameters PDF

693.88 K

Reference Designs (1)

CN0390

20 GHz to 37.5 GHz, RF Automatic Gain Control (AGC) Circuit

Reference Materials

3 See All

2 Quality Documentation

1 Tape & Reel Specification

Quality Documentation

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

Quality Documentation

Semiconductor Qualification Test Report: PHEMT-F (QTR: 2013-00269)

Tape &

**4 x 4 r
Specif
LC4, L**

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.

[HMC635LC4 Material Declaration](#)

[PCN-PDN Information](#)

[Quality And Reliability](#)

[Symbols and Footprints](#)

Discussions

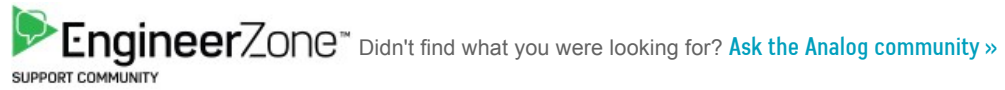
HMC635LC4 Discussions

[Footprint modifications to HMC635LC4 for 40 GHz operation?](#)

Re: HMC635LC4

HMC635LC4

All HMC635LC4 Discussions



Sample & Buy

Model	Package	Pins	Temp Range	Packing Qty	Price (100-499)	Price (1000+)	RoHS	Order from Analog Devices
HMC635LC4 Request PCN/PDN Notification Production	24 Id LCC (4x4mm w/2.5mm EP)	24	-55 to 85C	Reel, 50		-	Y Info	Sample Purchase
HMC635LC4TR Request PCN/PDN Notification Production	24 Id LCC (4x4mm w/2.5mm EP)	24	-55 to 85C	Reel, 100		-	Y Info	Purchase
HMC635LC4TR-R5 Request PCN/PDN Notification Production	24 Id LCC (4x4mm w/2.5mm EP)	24	-55 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
122763-HMC635LC4 Production	Evaluation Board - HMC635LC4 Evaluation PCB	Yes

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Years

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