



HMC564LC4 Data Sheet Change Comparison

HMC564LC4 Data Sheet Limit Change

Existing Rev v08.0618

New Rev v09.0424

AMPLIFIERS - LOW NOISE - SMT

HMC564LC4

v08.0618

GaAs SMT pHEMT LOW NOISE AMPLIFIER, 7 - 14 GHz

Typical Applications

The HMC564LC4 is ideal for use as a LNA or driver amplifier for:

- Point-to-Point Radios
- Point-to-Multi-Point Radios & VSAT
- Test Equipment and Sensors
- Military & Space

Features

- Noise Figure: 1.8 dB
- Gain: 17 dB
- OIP3: 25 dBm
- Single Supply: +3V @ 51 mA
- 50 Ohm Matched Input/Output
- RoHS Compliant 4 x 4 mm Package

Functional Diagram

General Description

The HMC564LC4 is a high dynamic range GaAs pHEMT MMIC Low Noise Amplifier housed in a leadless RoHS compliant 4x4 mm SMT package. Operating from 7 to 14 GHz, the HMC564LC4 features extremely flat small signal gain of 17 dB as well as 1.8 dB noise figure and +25 dBm output IP3 across the operating band. This self-biased LNA is ideal for microwave radios due to its consistent output power, single +3V supply operation, and DC blocked RF I/O's.

Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{dd1, 2} = +3\text{V}$

Parameter	Min.	Typ.	Max.	Units
Frequency Range		7 - 14		GHz
Gain	14	17		dB
Gain Variation Over Temperature		0.02	0.03	dB/°C
Noise Figure		1.8	2.2	dB
Input Return Loss		15		dB
Output Return Loss		14		dB
Output Power for 1 dB Compression (P1dB)	10	13		dBm
Saturated Output Power (Psat)		14.5		dBm
Output Third Order Intercept (IP3)		25		dBm
Supply Current (Idd)(Vdd = +3V)		51	75	mA

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AMPLIFIERS - LOW NOISE - SMT

HMC564LC4

v09.0424

GaAs SMT pHEMT LOW NOISE AMPLIFIER, 6 - 14 GHz

Typical Applications

The HMC564LC4 is ideal for use as a LNA or driver amplifier for:

- Point-to-Point Radios
- Point-to-Multi-Point Radios & VSAT
- Test Equipment and Sensors
- Military & Space

Features

- Noise Figure: 1.8 dB
- Gain: 17 dB
- OIP3: 25 dBm
- Single Supply: +3V @ 51 mA
- 50 Ohm Matched Input/Output
- RoHS Compliant 4 x 4 mm Package

Functional Diagram

General Description

The HMC564LC4 is a high dynamic range GaAs pHEMT MMIC Low Noise Amplifier housed in a leadless RoHS compliant 4x4 mm SMT package. Operating from 6-14 GHz, the HMC564LC4 features extremely flat small signal gain of 17 dB as well as 1.8 dB noise figure and +25 dBm output IP3 across the operating band. This self-biased LNA is ideal for microwave radios due to its consistent output power, single +3V supply operation, and DC blocked RF I/O's.

Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{dd1, 2} = +3\text{V}$

Parameter	Min.	Typ.	Max.	Units
Frequency Range		6 - 14		GHz
Gain	14	17		dB
Gain Variation Over Temperature		0.02	0.03	dB/°C
Noise Figure		1.8	2.2	dB
Input Return Loss		15		dB
Output Return Loss		14		dB
Output Power for 1 dB Compression (P1dB)	10	13		dBm
Saturated Output Power (Psat)		14.5		dBm
Output Third Order Intercept (IP3)		25		dBm
Supply Current (Idd)(Vdd = +3V)		51	75	mA

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