InGaP HBT 2.3 – 2.5 GHz Power Amplifier

PRODUCTION DATA SHEET

DESCRIPTION

The LX5514 is a power amplifier optimized for WLAN applications in the 2.3 – 2.5GHz frequency range. The power amplifier is implemented as a two-stage monolithic microwave integrated circuit (MMIC) with active bias and output pre-matching.

The device is manufactured with an InGaP/GaAs Heterojunction Bipolar Transistor (HBT) IC process (MOCVD). Power gain of 28dB is obtained with a low quiescent current of 80mA.

For 20dBm OFDM output power (64QAM, 54Mbps), the PA provides a low EVM (Error-Vector Magnitude) of 3.0%, and consumes 150mA total DC current.

The LX5514 is available in a standard 12-pin 2mm x 2mm micro-lead package (MLP12L). The compact footprint, low profile, and thermal capability of the MLP package make the LX5514 an ideal solution for medium-gain power amplifier requirements for IEEE 802.11b/g applications.

IMPORTANT: For the most current data, consult *MICROSEMI*'s website: **http://www.microsemi.com**

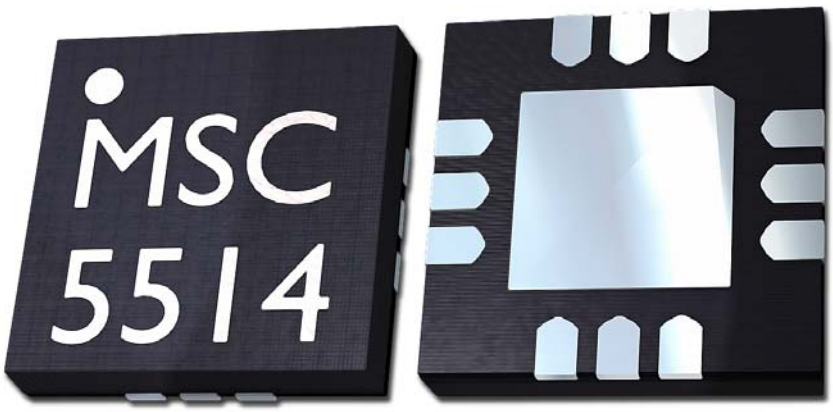
KEY FEATURES

- Advanced InGaP HBT
- 2.3 – 2.5GHz Operation
- Single-Polarity 3.3V Supply
- Quiescent Current 80mA
- Power Gain 28dB
- Total Current 150mA for P_{OUT}=20dBm OFDM
- EVM ~3 % 54Mbps / 64QAM
- Small Footprint: 2 x 2mm
- Low Profile: 0.46mm

APPLICATIONS

- IEEE 802.11b/g

PRODUCT HIGHLIGHT



PACKAGE ORDER INFO

LL	**Plastic MLPQ** **12 pin** RoHS Compliant / Pb-free	**LX5514LL**

Note: Available in Tape & Reel. Append the letters "TR" to the part number. (i.e. LX5514LL-TR)

LX5514

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INFORMATION

Thank you for your interest in Microsemi® IPG products.

The full data sheet for this device contains proprietary information.

To obtain a copy, please contact your local Microsemi sales representative. The name of your local representative can be obtained at the following link
http://www.microsemi.com/contact/contactfind.asp

or

Contact us directly by sending an email to:
IPGdatasheets@microsemi.com
Be sure to specify the data sheet you are requesting and include your company name and contact information and or vcard.

We look forward to hearing from you.

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