RF MICRO·DEVICES

Preliminary

RF2303

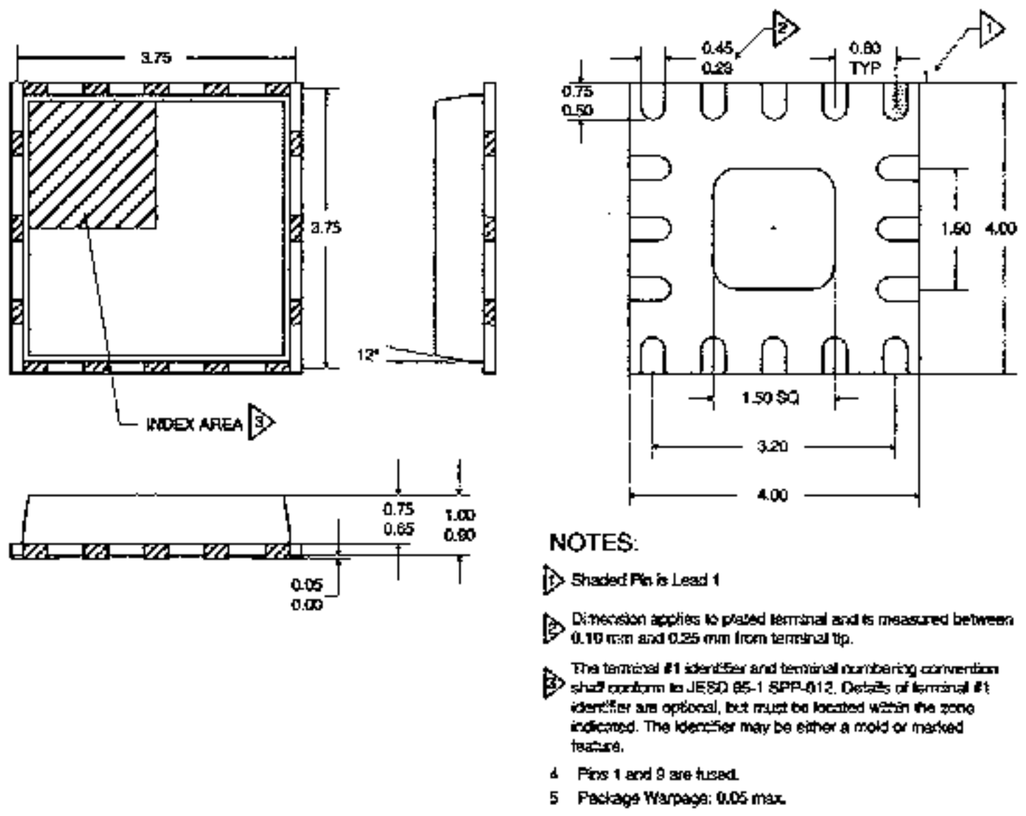
BROADBAND LINEAR VARIABLE GAIN AMPLIFIER

Typical Applications

- CDMA Cellular/PCS and JCDMA Systems
- TDMA Cellular/PCS Systems
- Wideband CDMA Systems
- Wireless Local Loop Systems
- GSM Systems
- PDC Systems (950MHz and 1450MHz)

Product Description

The RF2303 is a broadband linear variable gain amplifier that was designed specifically for digital communications systems that require linear amplification over a wide gain control range. It is suitable for use in WCDMA, as well as CDMA or TDMA systems in the cellular or PCS band, in DAMPS systems, and in PDC systems. Operating supply voltage ranges from 3V to 6V. The device operates over a large frequency band, from 100MHz to 2000MHz, and is tuned to a specific frequency band with an output bias feed inductor and blocking capacitor. Bias optimization may be achieved by adjusting the voltage to pin 8 (PD). The IC is manufactured on an advanced Gallium Arsenide Heterojunction Bipolar Transistor (GaAs HBT) process and is featured in a 4mmx4mm leadless plastic MLF16 package.



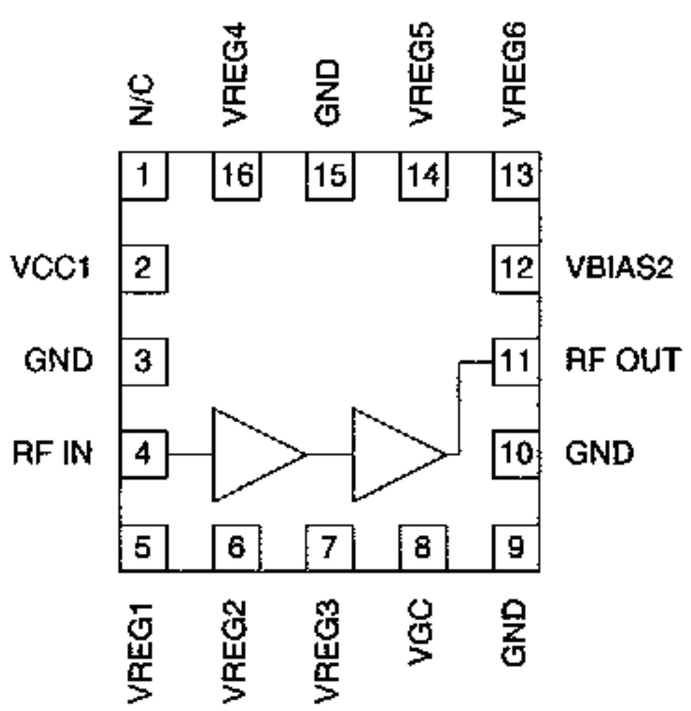
Package Style: MLF16

Optimum Technology Matching® Applied

- ☐ Si BJT
- ☑ GaAs HBT
- ☐ GaAs MESFET
- ☐ Si Bi-CMOS
- ☐ SiGe HBT
- ☐ Si CMOS

Features

- 58dB Linear Gain Control range
- Single 3V to 6V Supply
- 25dB Max Gain at 1900MHz
- 4dB Min Noise Figure at 1900MHz



Functional Block Diagram

Ordering Information

RF2303	Broadband Linear Variable Gain Amplifier
RF2303 PCBA	Fully Assembled Evaluation Board

RF Micro Devices, Inc.
7625 Thorndike Road
Greensboro, NC 27409, USA
Tel (336) 664 1233
Fax (336) 664 0454
http://www.rfmd.com