

Typical Applications

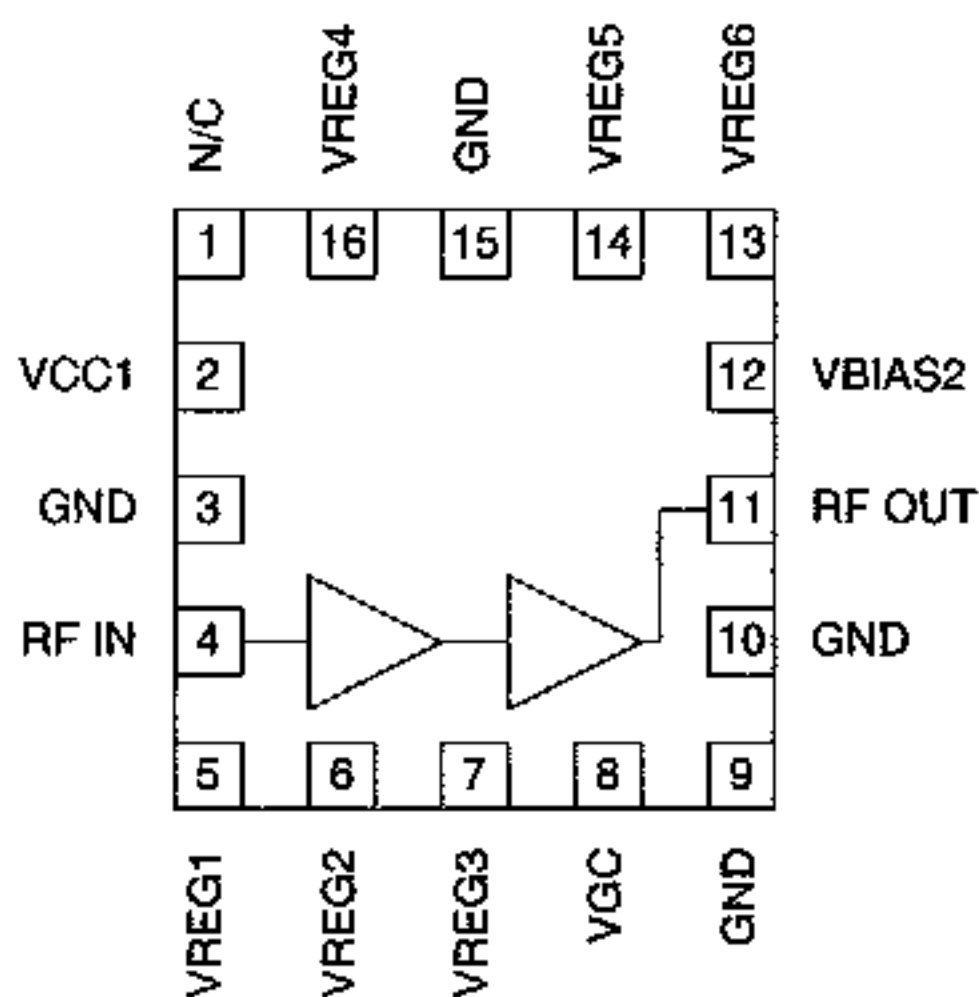
- CDMA Cellular/PCS and JCDMA Systems
- TDMA Cellular/PCS Systems
- Wideband CDMA Systems
- Wireless Local Loop Systems
- GSM Systems
- PDC Systems (950MHz and 1450MHz)

Product Description

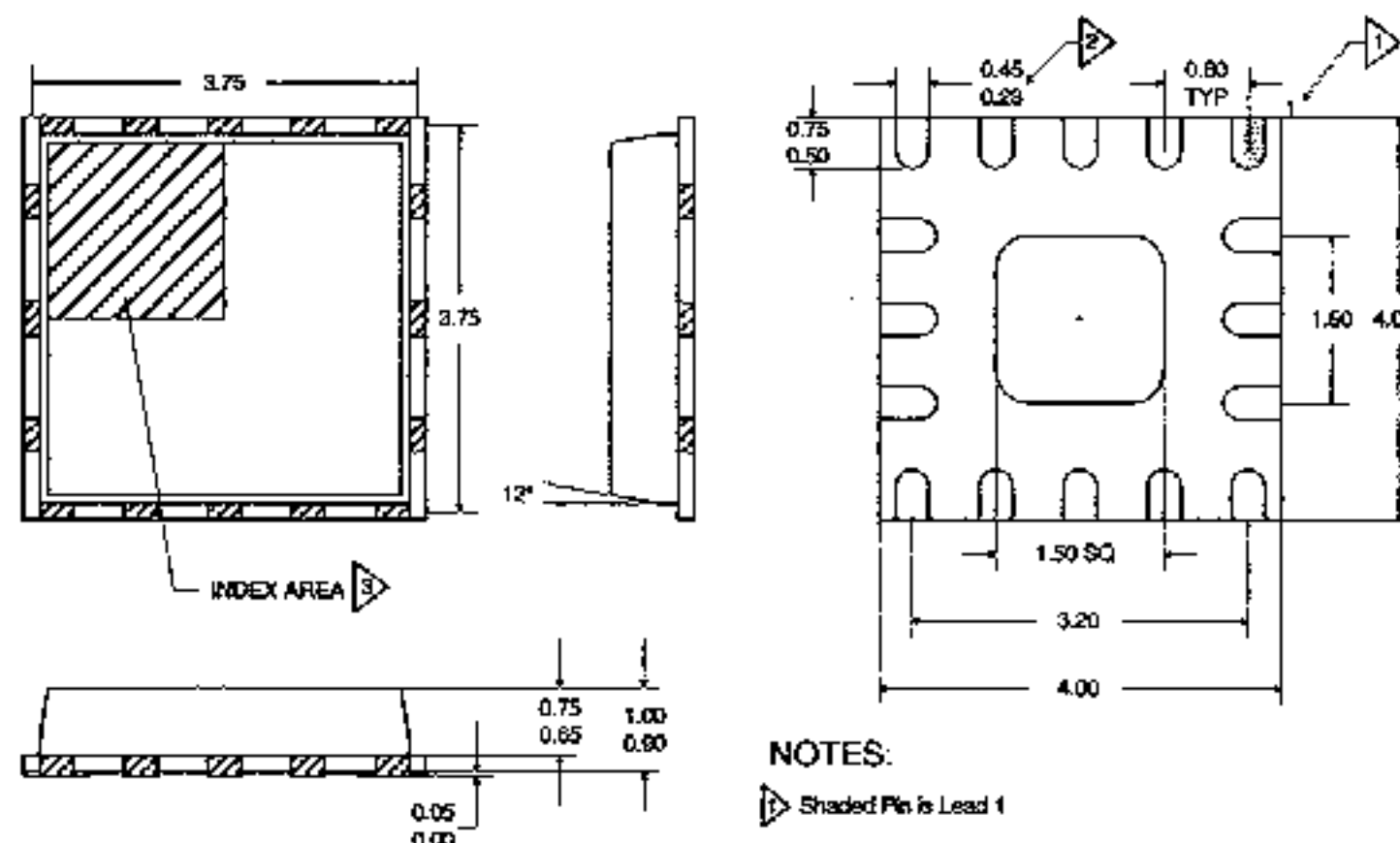
The RF2303 is a broadband linear variable gain amplifier that was designed specifically for digital communications systems that require linear amplification over a wide gain control range. It is suitable for use in WCDMA, as well as CDMA or TDMA systems in the cellular or PCS band, in DAMPS systems, 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.

Optimum Technology Matching® Applied

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



Functional Block Diagram



- NOTES:**
- ▶ Shaded Pin is Lead 1
 - ▶ Dimension applies to plated terminal and is measured between 0.10 mm and 0.25 mm from terminal tip.
 - ▶ The terminal #1 identifier and terminal numbering convention shall conform to JEDEC B5-1 SPP-012. Details of terminal #1 identifier are optional, but must be located within the zone indicated. The identifier may be either a mold or marked feature.
 - 4 Pins 1 and 9 are fused.
 - 5 Package Warpage: 0.05 max.

Package Style: MLF16

Features

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

Ordering Information

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

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GENERAL PURPOSE
AMPLIFIERS