

Proposed

RF3819

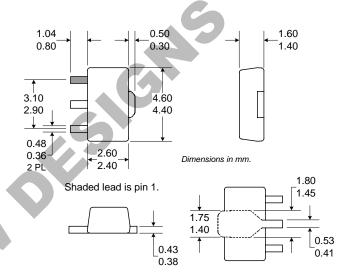
CASCADABLE BROADBAND GaAs MMIC AMPLIFIER DC TO 6GHz

Typical Applications

- Cellular Basestation Amplifiers and Transceivers
- Gain Stage or Driver Amplifiers for Linear and Saturated Amplifiers
- Narrow and Broadband Commercial and Military Radio Designs

Product Description

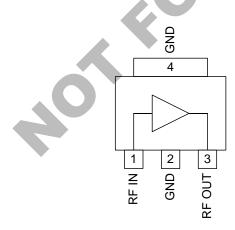
The RF3819 is a high-performance InGaP/GaAs general purpose RF and microwave gain block amplifier. This 50Ω amplifier is based on a reliable HBT MMIC design, providing unsurpassed performance for many small-signal applications. Designed with an external bias resistor, the RF3819 provides high output power and high gain over broad frequency range. This low-cost amplifier is packaged in a thermally efficient, industry standard, SOT89 package.



Optimum Technology Matching® Applied

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

- **√** InGaP/HBT
- ☐ GaN HEMT
- SiGe Bi-CMOS



Functional Block Diagram

- Reliable, Low-Cost HBT Design
- 12.1dB Gain, +17.3dBm P1dB@1.0GHz

Package Style: SOT89

- High P1dB of +14.6dBm @ 6.0GHz
- Single 6V Power Supply Operation
- 50Ω I/O Matched

Features

Thermally-Efficient Package

Ordering Information

RF3819 Cascadable Broadband GaAs MMIC Amplifier DC to

6GHz (Bulk: 25 piece increment)

RF3819SB 5-piece Sample Bag RF3819SR 100-piece Reel RF3819TR7 7" Reel (750 pieces) RF3819TR13 13" Reel (2,500 pieces) RF3819PCBA-410 Evaluation Board

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Rev A2 041013 4-1

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