

**Typical Applications**

- GaAs HBT Pre-Driver for Basestation Amplifiers
- Power Amplifier Stage for Commercial Wireless Infrastructure
- Class AB Operation for GSM/EDGE/CDMA2000/W-CDMA Transmitter Applications

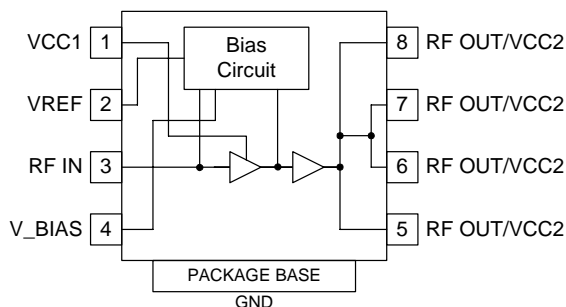
**Product Description**

The RF3805 is specifically designed for wireless infrastructure applications. Using a highly reliable GaAs HBT fabrication process, this high-performance dual-stage amplifier achieves high output power over a broad frequency range. The RF3805 amplifier also provides excellent efficiency and thermal stability through the use of a thermally-enhanced surface-mount AIN package. Ease of integration is accomplished through the incorporation of an optimized evaluation board design provided to achieve proper 50Ω operation. Various evaluation board configurations are available to address a broad range of wireless infrastructure applications:

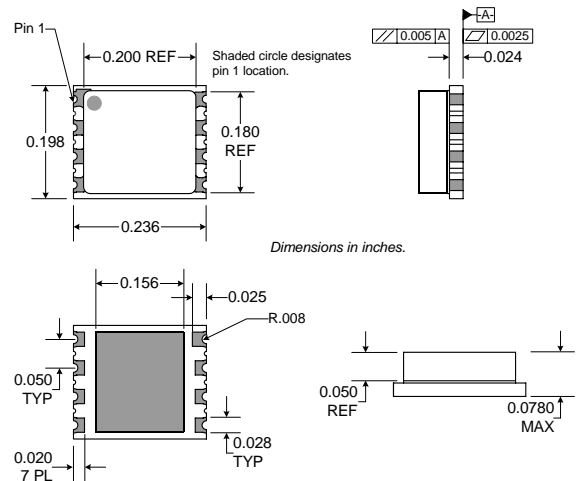
- GSM/EDGE1800
- CDMA2000
- W-CDMA

**Optimum Technology Matching® Applied**

- |                                     |  |                                       |
|-------------------------------------|--|---------------------------------------|
| <input type="checkbox"/> Si BJT     | <input checked="" type="checkbox"/> GaAs HBT | <input type="checkbox"/> GaAs MESFET  |
| <input type="checkbox"/> Si Bi-CMOS | <input type="checkbox"/> SiGe HBT            | <input type="checkbox"/> Si CMOS      |
| <input type="checkbox"/> InGaP/HBT  | <input type="checkbox"/> GaN HEMT            | <input type="checkbox"/> SiGe Bi-CMOS |



**Functional Block Diagram**



**Package Style: AIN**

**Features**

- 5W Output Power
- High Linearity
- 40% Power-Added Efficiency
- Thermally-Enhanced AIN Packaging
- Broadband Platform Design Approach

**Ordering Information**

RF3805	GaAs HBT Pre-Driver Amplifier
RF3805PCBA-411	Fully Assembled Evaluation Board - 1625 to 1665
RF3805PCBA-412	Fully Assembled Evaluation Board - 1710 to 1785
RF3805PCBA-413	Fully Assembled Evaluation Board - DCS1800
RF3805PCBA-414	Fully Assembled Evaluation Board - PCS1900
RF3805PCBA-415	Fully Assembled Evaluation Board - UMTS2100

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