

MRFIC1870

Product Preview

3.2 V DCS/PCS GaAs Integrated Power Amplifier

The MRFIC1870 is a single supply, RF power amplifier designed for the 2.0 W DCS/PCS handheld radios. The device is packaged in the QFN-20 package, with exposed backside pad, which allows excellent electrical and thermal performance through a solderable contact.

- Target 3.2 V Characteristics:
 - RF Output Power: 32 dBm Minimum
 - Efficiency: 42% Minimum
- Single Positive Supply Solution

DCS 1710 – 1785 MHz
PCS 1850 – 1910 MHz
**INTEGRATED
POWER AMPLIFIER**

**SEMICONDUCTOR
TECHNICAL DATA**



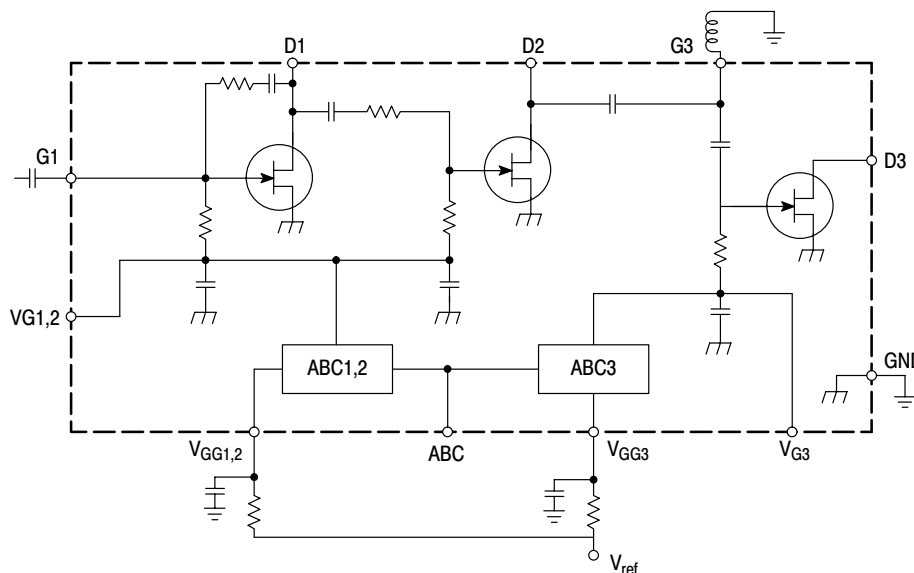
(Scale 2:1)

PLASTIC PACKAGE
CASE 1308
(QFN-20)

ORDERING INFORMATION

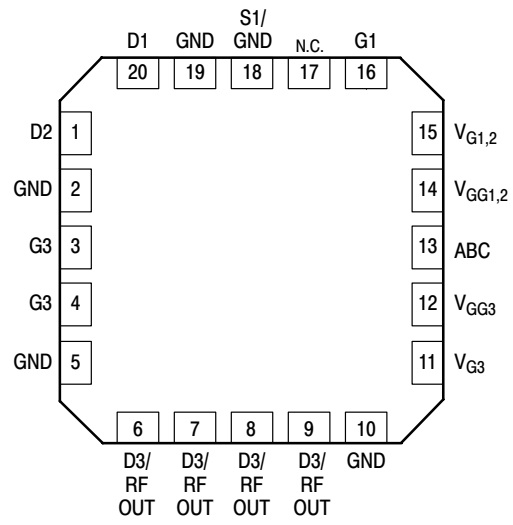
Device	Device Marking	Package
MRFIC1870	1870	QFN-20

Functional Block Diagram



MRFIC1870

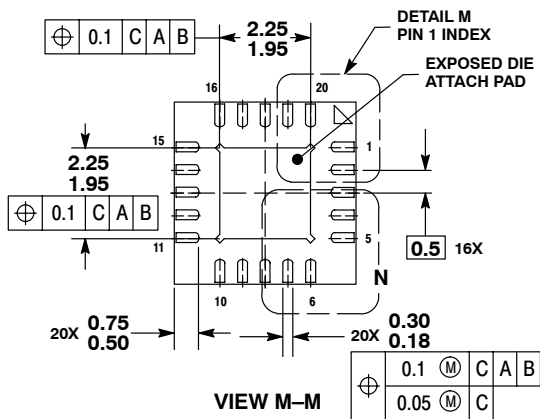
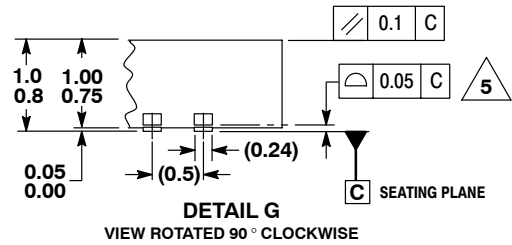
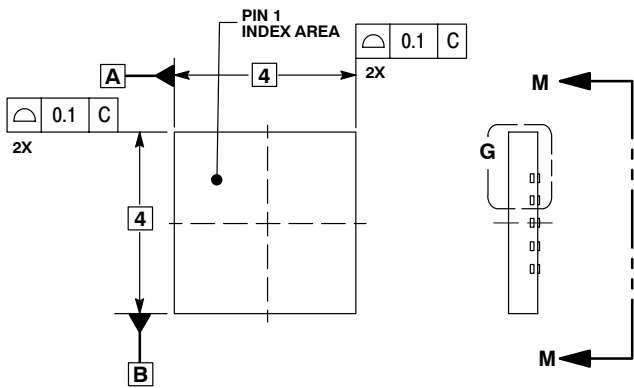
CONTACT CONNECTIONS



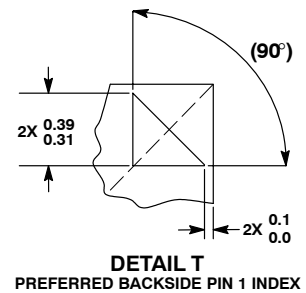
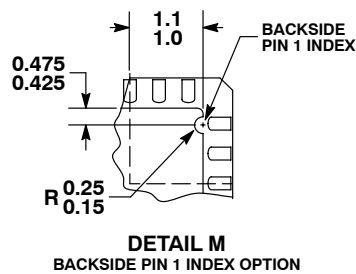
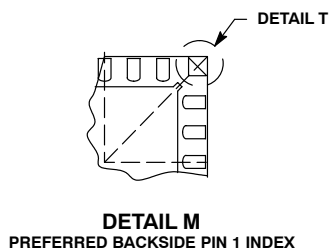
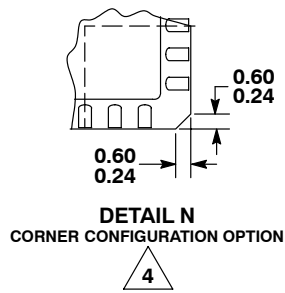
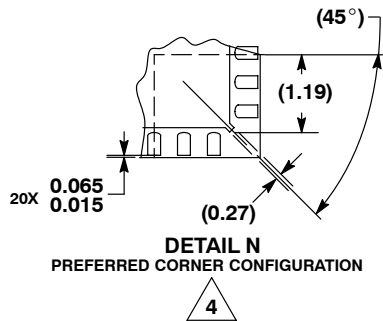
MRFIC1870

OUTLINE DIMENSIONS


PLASTIC PACKAGE
CASE 1308-02
(QFN-20)
ISSUE C



- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS.
 2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
 3. THE COMPLETE JEDEC DESIGNATOR FOR THIS PACKAGE IS: HF-PQFP-N.
 4. CORNER CHAMFER MAY NOT BE PRESENT. DIMENSIONS OF OPTIONAL FEATURES ARE FOR REFERENCE ONLY.
 5. COPLANARITY APPLIES TO LEADS, CORNER LEADS, AND DIE ATTACH PAD.
 6. FOR ANVIL SINGULATED QFN PACKAGES, MAXIMUM DRAFT ANGLE IS 12°.



MRFIC1870

Motorola reserves the right to make changes without further notice to any products herein. Motorola makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Motorola assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. "Typical" parameters which may be provided in Motorola data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Motorola does not convey any license under its patent rights nor the rights of others. Motorola products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the Motorola product could create a situation where personal injury or death may occur. Should Buyer purchase or use Motorola products for any such unintended or unauthorized application, Buyer shall indemnify and hold Motorola and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that Motorola was negligent regarding the design or manufacture of the part. Motorola, Inc. Motorola, Inc. is an Equal Opportunity/Affirmative Action Employer. MOTOROLA and the  logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners.

© Motorola, Inc. 2002

How to reach us:

USA/EUROPE/Locations Not Listed: Motorola Literature Distribution;
P.O. Box 5405, Denver, Colorado 80217. 1-303-675-2140 or 1-800-441-2447

JAPAN: Motorola Japan Ltd.; SPS, Technical Information Center, 3-20-1,
Minami-Azabu, Minato-ku, Tokyo 106-8573 Japan. 81-3-3440-3569

Technical Information Center: 1-800-521-6274

ASIA/PACIFIC: Motorola Semiconductors H.K. Ltd.; Silicon Harbour Centre,
2, Dai King Street, Tai Po Industrial Estate, Tai Po, N.T., Hong Kong.
852-26668334

HOME PAGE: <http://www.motorola.com/semiconductors/>

