


MOTOROLA

 ARCHIVED BY FREESCALE SEMICONDUCTOR, INC. 2005
Product Preview

Silicon Lateral FET, N-Channel Enhancement-Mode MOSFET

Designed for use in low voltage, moderate power amplifiers such as portable analog and digital cellular radios and PC RF modems.

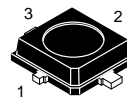
- Performance Specifications at 900 MHz:
 - Output Power = 36.5 dBm Typ
 - Power Gain = 10.5 dB Typ
 - Efficiency = 65% Typ
- Guaranteed Ruggedness at Load VSWR = 10:1
- New Plastic Surface Mount Package

MRF9382T1

**HIGH FREQUENCY
POWER TRANSISTOR
LDMOS FET
36.5 dBm, 900 MHz**

**SEMICONDUCTOR
TECHNICAL DATA**

- Pin 1. Drain
2. Gate
3. Source
4. Source



PLASTIC PACKAGE
CASE 449
(PLD-1, Tape & Reel Only)

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Drain-Source Voltage	V_{DSS}	28	Vdc
Drain-Gate Voltage ($R_{GS} = 1.0 M\Omega$)	V_{DGO}	28	Vdc
Gate-Source Voltage	V_{GS}	± 12	Vdc
Drain Current – Continuous	I_D	2.2	Adc
Total Device Dissipation @ $T_C = 50^\circ C$ Derate above $50^\circ C$	P_D	12.5 125	W mW/ $^\circ C$
Storage Temperature Range	T_{stg}	-65 to 150	$^\circ C$
Operating Junction Temperature	T_J	150	$^\circ C$

NOTE: ESD data available upon request.

THERMAL CHARACTERISTICS

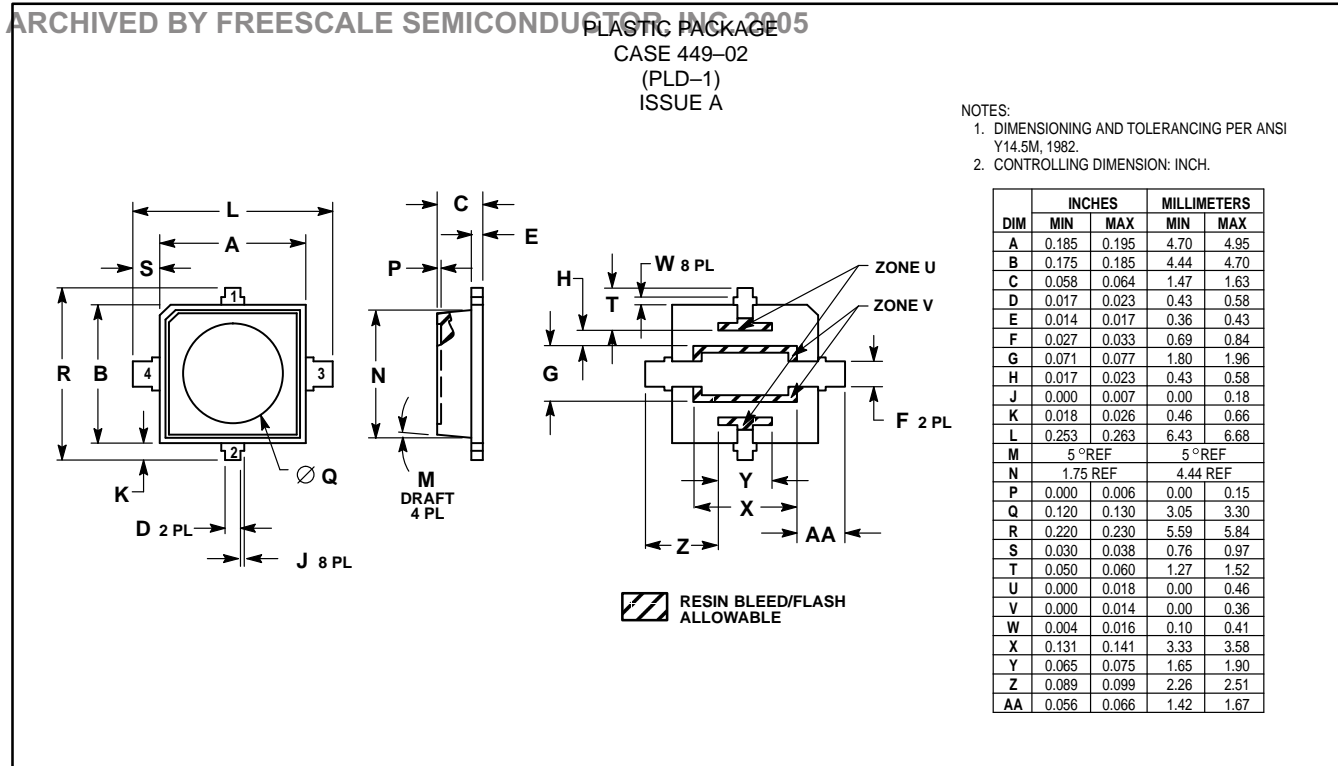
Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	8.0	$^\circ C/W$

ORDERING INFORMATION

Device	Marking	Package
MRF9382T1	9382	PLD-1 Tape & Reel*

*1,000 Units per 12 mm, 7 inch reel.

OUTLINE DIMENSIONS



Freescale Semiconductor, Inc. ARCHIVED BY FREESCALE SEMICONDUCTOR, INC. 2005

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 and are registered trademarks of Motorola, Inc. Motorola, Inc. is an Equal Opportunity/Affirmative Action Employer.

Mfax is a trademark of Motorola, Inc.

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.; SPD, Strategic Planning Office, 141, 4-32-1 Nishi-Gotanda, Shinagawa-ku, Tokyo, Japan. 81-3-5487-8488

Customer Focus Center: 1-800-521-6274

Mfax™: RMFAX0@email.sps.mot.com – TOUCHTONE 1-602-244-6609
Motorola Fax Back System – US & Canada ONLY 1-800-774-1848
–http://sps.motorola.com/mfax/

ASIA/PACIFIC: Motorola Semiconductors H.K. Ltd.; 8B Tai Ping Industrial Park, 51 Ting Kok Road, Tai Po, N.T., Hong Kong. 852-26629298

HOME PAGE: <http://motorola.com/sps/>



**For More Information On This Product,
Go to: www.freescale.com**