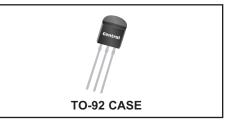
# 2N3819

# SILICON N-CHANNEL JFET



www.centralsemi.com

The CENTRAL SEMICONDUCTOR 2N3819 is a silicon N-Channel JFET designed for RF amplifier and mixer applications.



MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Drain-Gate Voltage	$V_{DG}$	25	V
Drain-Source Voltage	$V_{DS}$	25	V
Gate-Source Voltage	$V_{GS}$	25	V
Continuous Gate Current	$I_{G}$	10	mA
Power Dissipation	$P_{D}$	360	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>sta</sub>	-65 to +150	°C

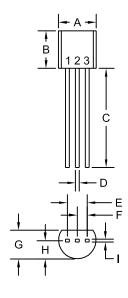
		o sig		
ELECTRICAL SYMBOL	L CHARACTERISTICS: (T <sub>A</sub> =25°C t TEST CONDITIONS	unless otherwise no MIN	MAX	UNITS
IGSS	V <sub>GS</sub> =15V		2.0	nA
IGSS	V <sub>GS</sub> =15V, T <sub>A</sub> =100°C		2.0	μΑ
I <sub>DSS</sub>	V <sub>DS</sub> =15V	2.0	20	mA
BVGSS	I <sub>G</sub> =1.0μA	25		V
V <sub>GS(OFF)</sub>	$V_{DS}$ =15V, $I_D$ =2.0nA		8.0	V
$V_{GS}$	V <sub>DS</sub> =15V, I <sub>D</sub> =200μA	0.5	7.5	V
Y <sub>fs</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0MHz	2.0	6.5	mS
Y <sub>fs</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=100MHz	1.6		mS
$ Y_{os} $	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0kHz		50	μS
C <sub>iss</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0MHz		8.0	pF
C <sub>rss</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0MHz		4.0	pF

## 2N3819

## SILICON N-CHANNEL JFET



## **TO-92 CASE - MECHANICAL OUTLINE**



DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
A (DIA)	0.175	0.205	4.45	5.21			
В	0.170	0.210	4.32	5.33			
С	0.500	-	12.70	-			
D	0.016	0.022	0.41	0.56			
Ε	0.100		2.54				
F	0.050		1.27				
G	0.125	0.165	3.18	4.19			
Н	0.080	0.105	2.03	2.67			
	0.015		0.38				

TO-92 (REV: R1)

## LEAD CODE:

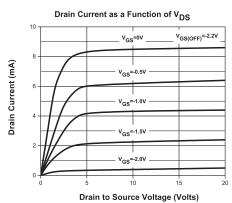
- 1) Drain
- 2) Gate
- 3) Source

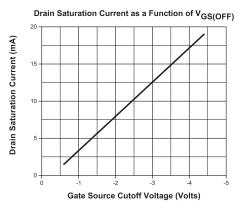
#### MARKING:

**FULL PART NUMBER** 

# TYPICAL ELECTRICAL CHARACTERISTICS

R1



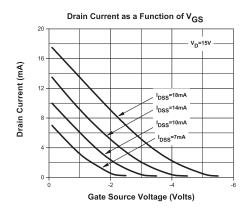


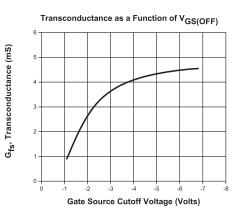
R1 (9-January 2014)

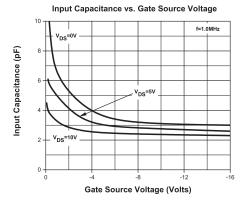
# 2N3819

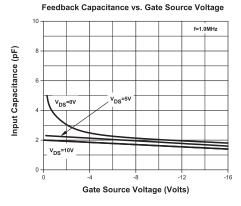
# SILICON N-CHANNEL JFET

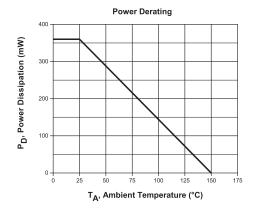












R1 (9-January 2014)

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#### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

#### **DESIGNER SUPPORT/SERVICES**

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

#### REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

#### **CONTACT US**

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