

2N3819
SILICON
N-CHANNEL JFET



www.centrasemi.com

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



MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Drain-Gate Voltage
 Drain-Source Voltage
 Gate-Source Voltage
 Continuous Gate Current
 Power Dissipation
 Operating and Storage Junction Temperature

SYMBOL

V_{DG}
 V_{DS}
 V_{GS}
 I_G
 P_D
 T_J, T_{stg}

25
 25
 25
 10
 360
 -65 to +150

UNITS

V
 V
 V
 mA
 mW
 $^\circ\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL

TEST CONDITIONS

MIN

MAX

UNITS

I_{GSS} $V_{GS}=15\text{V}$
 I_{GSS} $V_{GS}=15\text{V}, T_A=100^\circ\text{C}$
 I_{DSS} $V_{DS}=15\text{V}$
 BV_{GSS} $I_G=1.0\mu\text{A}$
 $V_{GS(OFF)}$ $V_{DS}=15\text{V}, I_D=2.0\text{nA}$
 V_{GS} $V_{DS}=15\text{V}, I_D=200\mu\text{A}$
 $|Y_{fs}|$ $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$
 $|Y_{fs}|$ $V_{DS}=15\text{V}, V_{GS}=0, f=100\text{MHz}$
 $|Y_{os}|$ $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$
 C_{iss} $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$
 C_{rss} $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$

2.0
 25
 0.5
 2.0
 1.6

2.0
 2.0
 20
 8.0
 7.5
 6.5
 50
 8.0
 4.0

nA
 μA
 mA
 V
 V
 V
 mS
 mS
 μS
 pF
 pF

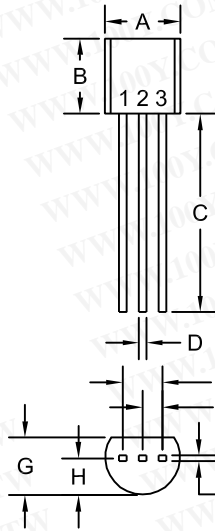
勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R1 (9-January 2014)

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TO-92 CASE - MECHANICAL OUTLINE



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

TO-92 (REV: R1)

LEAD CODE:

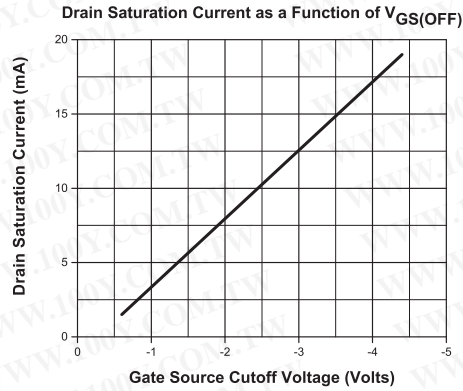
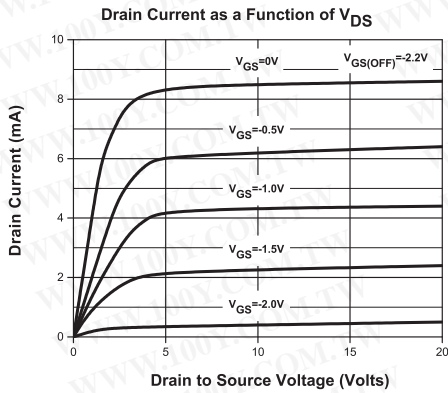
- 1) Drain
- 2) Gate
- 3) Source

MARKING:

FULL PART NUMBER

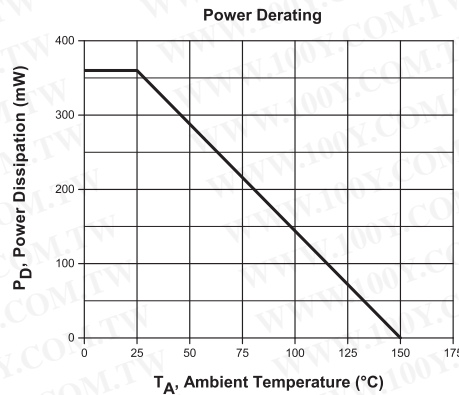
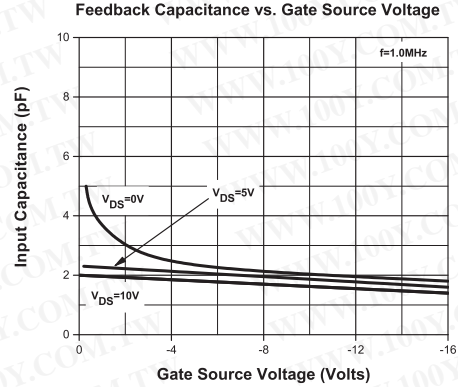
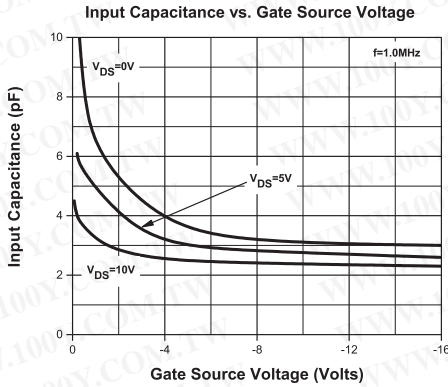
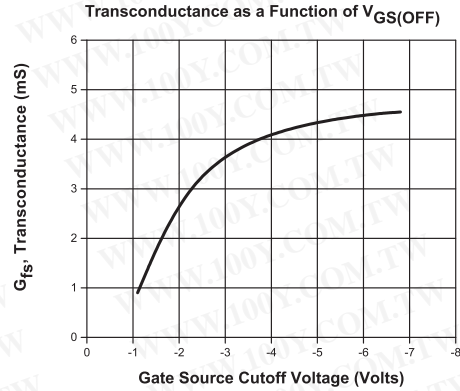
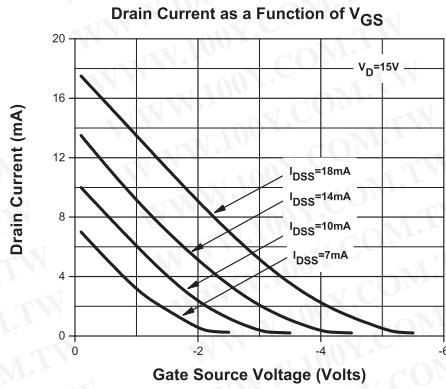
R1

TYPICAL ELECTRICAL CHARACTERISTICS



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