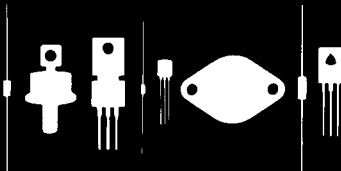


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145 Adams Avenue
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2N3819

N-CHANNEL SILICON JUNCTION FET

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3819 type is a Silicon N-Channel Junction Field Effect Transistor designed for RF Amplifier and mixer applications.

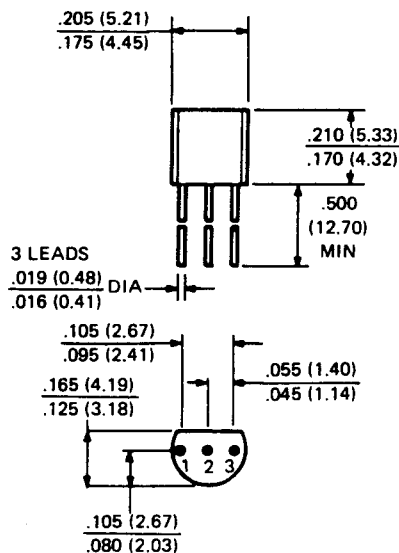
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

| | SYMBOL | | UNIT |
|---|----------------|-------------|------------------|
| Drain-Gate Voltage | V_{GD} | 25 | V |
| Drain-Source Voltage | V_{DS} | 25 | V |
| Gate-Source Voltage (Reverse) | V_{GS} | 25 | V |
| Gate Current | I_G | 10 | mA |
| Power Dissipation | P_D | 360 | mW |
| Operating and Storage Junction Temperature | T_J, T_{STG} | -65 TO +150 | $^\circ\text{C}$ |

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

| SYMBOL | TEST CONDITIONS | MIN | MAX | UNIT |
|---------------|--|------|------|----------------|
| I_{DSS} | $V_{DS}=15\text{V}$ | 2 | 20 | mA |
| I_{GSS} | $V_{GS}=15\text{V}$ | | 2.0 | nA |
| I_{GSS} | $V_{GS}=15\text{V}, T_A=100^\circ\text{C}$ | | 2.0 | μA |
| BV_{GSS} | $I_G=1.0\mu\text{A}$ | 25 | | V |
| V_{GS} | $V_{DS}=15\text{V}, I_D=200\mu\text{A}$ | 0.5 | 7.5 | V |
| $V_{GS(OFF)}$ | $V_{DS}=15\text{V}, I_D=2.0\text{nA}$ | | 8.0 | V |
| C_{iss} | $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$ | | 8.0 | pF |
| C_{rss} | $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$ | | 4.0 | pF |
| τ_{yfs1} | $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$ | 2000 | 6500 | μho |
| τ_{yfs1} | $V_{DS}=15\text{V}, V_{GS}=0, f=100\text{MHz}$ | 1600 | | μho |
| τ_{yos1} | $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$ | | 50 | μho |

OUTLINE DRAWING:



LEAD CODE:

1. DRAIN
2. GATE
3. SOURCE

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