

2N5457  
2N5458  
2N5459

**SILICON  
N-CHANNEL JFETS**



[www.centrasemi.com](http://www.centrasemi.com)

The CENTRAL SEMICONDUCTOR 2N5457, 2N5458, and 2N5459 are silicon N-Channel JFETs designed for switching and amplifier applications.



**TO-92 CASE**

**MARKING: FULL PART NUMBER**

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

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

| SYMBOL         |             | UNITS            |
|----------------|-------------|------------------|
| $V_{DS}$       | 25          | V                |
| $V_{DG}$       | 25          | V                |
| $V_{GS}$       | 25          | V                |
| $I_G$          | 10          | mA               |
| $P_D$          | 310         | mW               |
| $T_J, T_{stg}$ | -65 to +150 | $^\circ\text{C}$ |

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

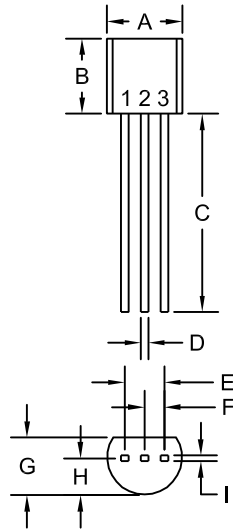
| SYMBOL        | TEST CONDITIONS                                | 2N5457 |      | 2N5458 |      | 2N5459 |      | UNITS         |
|---------------|--|--------|------|--------|------|--------|------|---------------|
|               |  | MIN    | MAX  | MIN    | MAX  | MIN    | MAX  |               |
| $I_{GSS}$     | $V_{GS}=15\text{V}$                            | -      | 1.0  | -      | 1.0  | -      | 1.0  | nA            |
| $I_{GSS}$     | $V_{GS}=15\text{V}, T_A=100^\circ\text{C}$     | -      | 200  | -      | 200  | -      | 200  | nA            |
| $I_{DSS}$     | $V_{DS}=15\text{V}$                            | 1.0    | 5.0  | 2.0    | 9.0  | 4.0    | 16   | mA            |
| $BV_{GSS}$    | $I_G=10\mu\text{A}$                            | 25     | -    | 25     | -    | 25     | -    | V             |
| $V_{GS(OFF)}$ | $V_{DS}=15\text{V}, I_D=10\text{nA}$           | 0.5    | 6.0  | 1.0    | 7.0  | 2.0    | 8.0  | V             |
| $C_{rss}$     | $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$ | -      | 3.0  | -      | 3.0  | -      | 3.0  | pF            |
| $C_{iss}$     | $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$ | -      | 7.0  | -      | 7.0  | -      | 7.0  | pF            |
| $g_{fs}$      | $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$ | 1.0K   | 5.0K | 1.5K   | 5.5K | 2.0K   | 6.0K | $\mu\text{S}$ |
| $g_{os}$      | $V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$ | -      | 50   | -      | 50   | -      | 50   | $\mu\text{S}$ |

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TO-92 CASE - MECHANICAL OUTLINE



R1

| 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) Source
- 3) Gate

MARKING:

FULL PART NUMBER

R1 (6-March 2014)