



**EN:** This Datasheet is presented by the manufacturer.

Please visit our website for pricing and availability at [www.hestore.hu](http://www.hestore.hu).

**2SC1815**

**SILICON**

**NPN TRANSISTOR**



**TO-92 CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2SC1815 is a silicon NPN transistor, manufactured by the epitaxial planar process, designed for general purpose amplifier applications.

**MARKING: FULL PART NUMBER**

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

|                                            | SYMBOL         |             | UNITS                |
|--------------------------------------------|----------------|-------------|----------------------|
| Collector-Base Voltage                     | $V_{CBO}$      | 60          | V                    |
| Collector-Emitter Voltage                  | $V_{CEO}$      | 50          | V                    |
| Emitter-Base Voltage                       | $V_{EBO}$      | 5.0         | V                    |
| Continuous Collector Current               | $I_C$          | 150         | mA                   |
| Power Dissipation                          | $P_D$          | 400         | mW                   |
| Operating and Storage Junction Temperature | $T_J, T_{stg}$ | -55 to +125 | $^{\circ}\text{C}$   |
| Thermal Resistance                         | $\Theta_{JA}$  | 250         | $^{\circ}\text{C/W}$ |

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

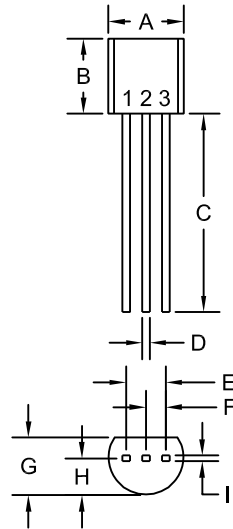
| SYMBOL        | TEST CONDITIONS                                       | MIN | MAX  | UNITS |
|---------------|-------------------------------------------------------|-----|------|-------|
| $I_{CBO}$     | $V_{CB}=60\text{V}$                                   |     | 100  | nA    |
| $I_{CEO}$     | $V_{CE}=50\text{V}$                                   |     | 100  | nA    |
| $I_{EBO}$     | $V_{EB}=5.0\text{V}$                                  |     | 100  | nA    |
| $BV_{CBO}$    | $I_C=100\mu\text{A}$                                  | 60  |      | V     |
| $BV_{CEO}$    | $I_C=100\mu\text{A}$                                  | 50  |      | V     |
| $BV_{EBO}$    | $I_E=100\mu\text{A}$                                  | 5.0 |      | V     |
| $V_{CE(SAT)}$ | $I_C=100\text{mA}, I_B=10\text{mA}$                   |     | 0.25 | V     |
| $V_{BE(SAT)}$ | $I_C=100\text{mA}, I_B=10\text{mA}$                   |     | 1.0  | V     |
| $V_{BE}$      | $I_E=310\text{mA}$                                    |     | 1.45 | V     |
| $h_{FE}$      | $V_{CE}=6.0\text{V}, I_C=2.0\text{mA}$                | 70  | 700  |       |
| $f_t$         | $V_{CE}=10\text{V}, I_C=1.0\text{mA}, f=30\text{MHz}$ | 80  |      | MHz   |

R0 (31-October 2016)

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TO-92 CASE - MECHANICAL OUTLINE



R1

| DIMENSIONS |        |       |             |      |
|------------|--------|-------|-------------|------|
| 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) Emitter
- 2) Collector
- 3) Base

MARKING: FULL PART NUMBER

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