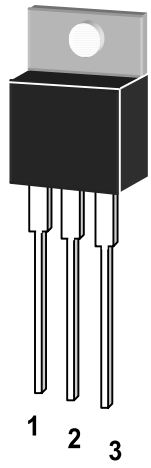
# SD13003T

NPN Silicon Epitaxial Planar Transistor for power switching and electron rectifier applications.

The transistor is subdivided into one group according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.




1. Base 2. Collector 3. Emitter

TO-220 Plastic Package

Absolute Maximum Ratings ($T_a$ = 25℃)

| | Symbol | Rating | Unit |
|---|---|---|---|
| Collector Base Voltage | $V_{CBO}$ | 600 | V |
| Collector Emitter Voltage | $V_{CEO}$ | 400 | V |
| Emitter Base Voltage | $V_{EBO}$ | 9 | V |
| Collector Current | $I_C$ | 1.5 | A |
| Power Dissipation | $P_{tot}$ | 1.5 | W |
| Junction Temperature | $T_j$ | 150 | $^{O}$C |
| Storage Temperature Range | $T_s$ | -55 to +150 | $^{O}$C |

G S P FORM A IS AVAILABLE

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**Characteristics at $T_{amb}$=25 $^{O}$C**

| | Symbol | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| DC Current Gain at $V_{CE}$=10V, $I_C$=100mA | $h_{FE}$ | 10 | - | 70 | |
| Collector Base Breakdown Voltage at $I_C$=1mA | $V_{(BR)CBO}$ | 600 | - | - | V |
| Collector Emitter Breakdown Voltage at $I_C$=10mA | $V_{(BR)CEO}$ | 400 | - | - | V |
| Emitter Base Breakdown Voltage at $I_E$=1mA | $V_{(BR)EBO}$ | 9 | - | - | V |
| Collector Cutoff Current at $V_{CB}$=600V | $I_{CBO}$ | - | - | 100 | nA |
| Emitter Cutoff Current at $V_{EB}$=9V | $I_{EBO}$ | - | - | 100 | μA |
| Collector Emitter Saturation Voltage at $I_C$=1A, $I_B$=250mA | $V_{CE(sat)}$ | - | - | 1.0 | V |
| Base-Emitter Saturation Voltage at $I_C$=1A, $I_B$=250mA | $V_{BE(sat)}$ | - | - | 1.2 | V |

**G S P FORM A IS AVAILABLE**