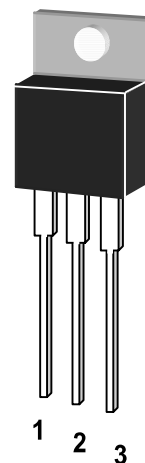


SD13007

NPN Silicon Transistor
for high-voltage,high-speed power switching .



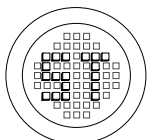
1. Base 2. Collector 3. Emitter

TO-220 Plastic Package

Absolute Maximum Ratings ($T_a=25\text{ }^{\circ}\text{C}$)

| | Symbol | Value | Unit |
|---------------------------|-----------|-------------|--------------------|
| Collector Base Voltage | V_{CBO} | 700 | V |
| Collector Emitter Voltage | V_{CEO} | 400 | V |
| Emitter Base Voltage | V_{EBO} | 9 | V |
| Collector Current | I_C | 8 | A |
| Power Dissipation | P_{tot} | 80 | W |
| Junction Temperature | T_J | 150 | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_S | -55 to +150 | $^{\circ}\text{C}$ |

G S P FORM A IS AVAILABLE



РАДИОТЕХ-ТРЕЙД

Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

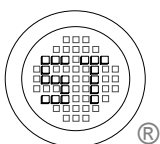
SD13007

Characteristics at Ta=25 °C

| | Symbol | Min. | Typ. | Max. | Unit |
|--|---------------|------|------|------|---------|
| DC Current Gain at $V_{CE}=5V$, $I_C=2A$ | h_{FE} | 10 | - | 70 | - |
| Collector Emitter Breakdown Voltage at $I_C=10mA$ | $V_{(BR)CEO}$ | 400 | - | - | V |
| Collector Base Breakdown Voltage at $I_C=100\mu A$ | $V_{(BR)CBO}$ | 700 | - | - | V |
| Emitter Base Breakdown Voltage at $I_E=1mA$ | $V_{(BR)EBO}$ | 9 | - | - | V |
| Collector Cutoff Current at $V_{CB}=700V$ | I_{CBO} | - | - | 100 | μA |
| Emitter Cutoff Current at $V_{EB}=9V$ | I_{EBO} | - | - | 100 | μA |
| Collector-Emitter Saturation Voltage at $I_C=5A$, $I_B=1A$ | $V_{CE(sat)}$ | - | - | 2 | V |
| Base-Emitter Saturation Voltage at $I_C=5A$, $I_B=1A$ | $V_{BE(sat)}$ | - | - | 1.6 | V |
| Current-Gain-Bandwidth Product at $V_{CE}=10V$, $I_C=0.5A$ | f_T | 4 | - | - | MHz |
| Output Capacitance at $V_{CB}=10V$, $f=0.1MHz$ | C_{OB} | - | 110 | - | pF |

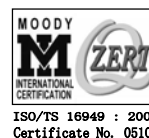
Pulse Test: Pulse Width \leq 300 μs , Duty Cycle \leq 2%.

G S P FORM A IS AVAILABLE



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 550-1500-02-002-001

Dated : 07/12/2002