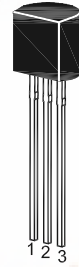


ST 13002A

查询"13002A"供应商

NPN Silicon Epitaxial Planar Transistor

High voltage power transistor



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

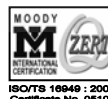
| Parameter | Symbol | Value | Unit |
|--------------------------------|------------------|---------------|------------------|
| Collector Base Voltage | V_{CBO} | 700 | V |
| Collector Emitter Voltage | V_{CEO} | 400 | V |
| Emitter Base Voltage | V_{EBO} | 9 | V |
| Collector Current | I_{C} | 0.3 | A |
| Collector Current (Pulse) | I_{CP} | 0.5 | A |
| Total Power Dissipation | P_{tot} | 0.6 | W |
| Operating Junction Temperature | T_{j} | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 150 | $^\circ\text{C}$ |

Characteristics at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Min. | Max. | Unit |
|---|-----------------------------|------|------|---------------|
| DC Current Gain at $V_{\text{CE}} = 10\text{ V}$, $I_{\text{C}} = 10\ \mu\text{A}$ | h_{FE} | 15 | 40 | - |
| at $V_{\text{CE}} = 10\text{ V}$, $I_{\text{C}} = 100\text{ mA}$ | h_{FE} | 25 | 40 | - |
| at $V_{\text{CE}} = 10\text{ V}$, $I_{\text{C}} = 280\text{ mA}$ | h_{FE} | 12 | 30 | - |
| Collector Base Cutoff Current at $V_{\text{CB}} = 700\text{ V}$ | I_{CBO} | - | 10 | μA |
| Emitter Base Cutoff Current at $V_{\text{EB}} = 7\text{ V}$ | I_{EBO} | - | 10 | μA |
| Collector Base Breakdown Voltage at $I_{\text{C}} = 10\text{ mA}$ | $V_{(\text{BR})\text{CBO}}$ | 700 | - | V |
| Collector Emitter Breakdown Voltage at $I_{\text{C}} = 1\text{ mA}$ | $V_{(\text{BR})\text{CEO}}$ | 400 | - | V |
| Emitter Base Breakdown Voltage at $I_{\text{E}} = 1\text{ mA}$ | $V_{(\text{BR})\text{EBO}}$ | 9 | - | V |
| Collector Emitter Saturation Voltage at $I_{\text{C}} = 100\text{ mA}$, $I_{\text{B}} = 10\text{ mA}$ | V_{CEsat} | - | 1 | V |
| at $I_{\text{C}} = 200\text{ mA}$, $I_{\text{B}} = 20\text{ mA}$ | | - | 1.5 | |
| Transition Frequency at $V_{\text{CE}} = 10\text{ V}$, $I_{\text{C}} = 100\text{ mA}$ | f_{T} | 4 | - | MHz |

SEMTECH ELECTRONICS LTD.

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



Dated : 05/09/2009