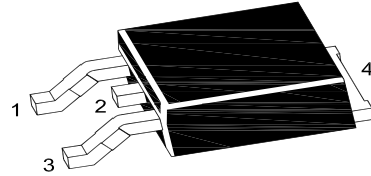


ST 2SD1817R

NPN Silicon Epitaxial Planar Transistor

Motor drivers, hammer drivers and
relay drivers applications



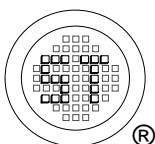
1. Base 2. Collector 3. Emitter 4. Collector
TO-252 Plastic Package

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

| Parameter | Symbol | Value | Unit |
|---|-----------|---------------|------------------|
| Collector Base Voltage | V_{CBO} | 80 | V |
| Collector Emitter Voltage | V_{CEO} | 60 | V |
| Emitter Base Voltage | V_{EBO} | 6 | V |
| Collector Current | I_C | 3 | A |
| Collector Current (Pulse) | I_{CP} | 6 | A |
| Collector Dissipation Collector Dissipation @ $T_C = 25\text{ }^\circ\text{C}$ | P_C | 1 15 | W |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_s | - 55 to + 150 | $^\circ\text{C}$ |

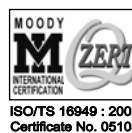
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter | Symbol | Min. | Max. | Unit |
|---|----------------------|--------------|--------|---------------|
| DC Current Gain at $V_{CE} = 2\text{ V}$, $I_C = 1\text{ A}$ at $V_{CE} = 2\text{ V}$, $I_C = 2\text{ A}$ | h_{FE} h_{FE} | 2000 1000 | - - | - - |
| Collector Base Breakdown Voltage at $I_C = 1\text{ mA}$ | $V_{(BR)CBO}$ | 80 | - | V |
| Collector Emitter Breakdown Voltage at $I_C = 25\text{ mA}$ | $V_{(BR)CEO}$ | 60 | - | V |
| Collector Cutoff Current at $V_{CB} = 60\text{ V}$ | I_{CBO} | - | 10 | μA |
| Emitter Cutoff Current at $V_{EB} = 5\text{ V}$ | I_{EBO} | - | 2.5 | mA |
| Collector Emitter Saturation Voltage at $I_C = 2\text{ A}$, $I_B = 4\text{ mA}$ | $V_{CE(sat)}$ | - | 1.5 | V |
| Base Emitter Saturation Voltage at $I_C = 2\text{ A}$, $I_B = 4\text{ mA}$ | $V_{BE(sat)}$ | - | 2 | V |



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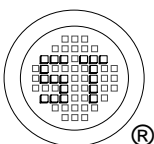
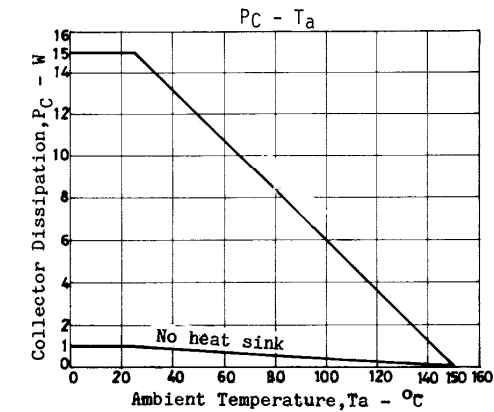
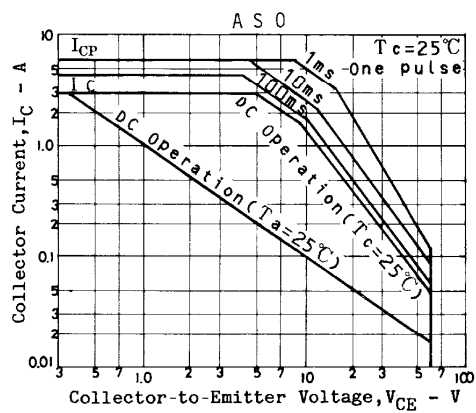
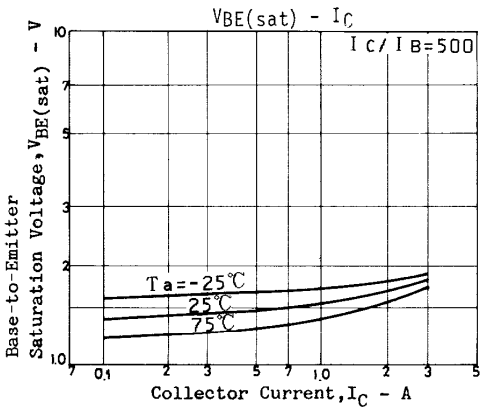
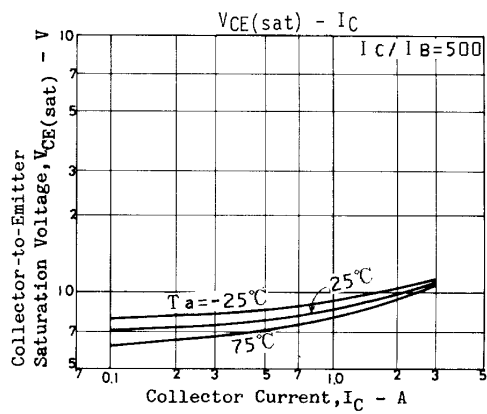
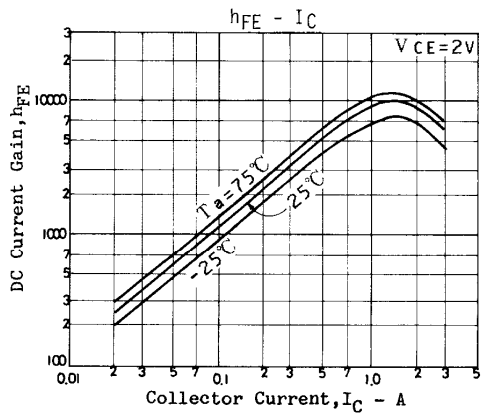
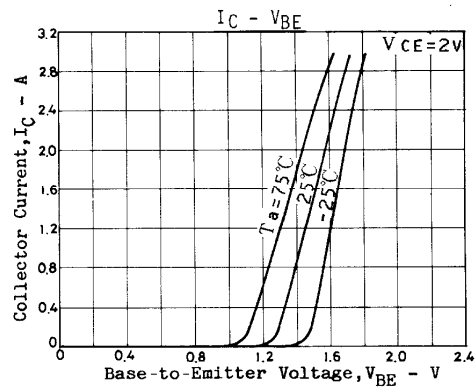
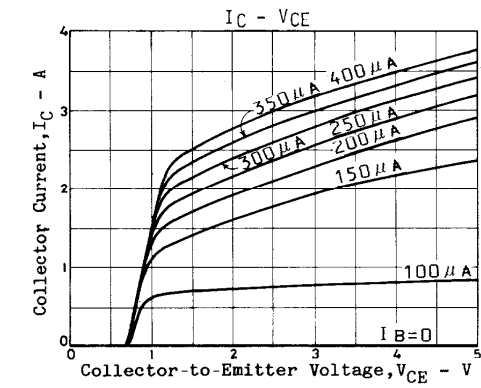
(Subsidiary of Sino-Tech International Holdings Limited, a company
listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002 Certificate No. 05103
ISO 14001:2004 Certificate No. 7118
ISO 9001:2000 Certificate No. 050698

Dated : 10/08/2006

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ISO/TS 16949 : 2002
 Certificate No. 05103



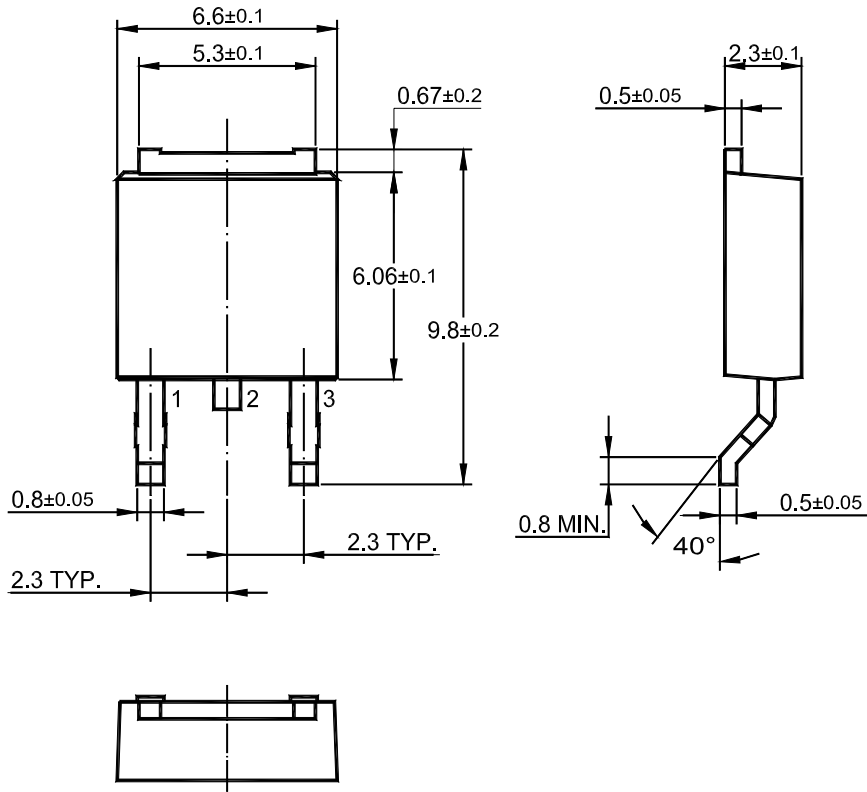
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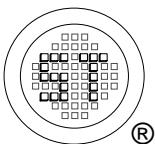
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ST 2SD1817R

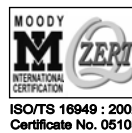
TO-252 PACKAGE OUTLINE



Dimensions in mm



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ISO 14001:2004
Certificate No. 71116

ISO 9001:2000
Certificate No. 0506098

Dated : 10/08/2006