



● 特点

耐压高 开关速度快

安全工作区宽 符合 RoHS 规范

● 应用

节能灯、电子镇流器

电子变压器、开关电源

FEATURES

▲HIGH VOLTAGE CAPABILITY ▲HIGH SPEED SWITCHING

▲WIDE SOA ▲RoHS COMPL

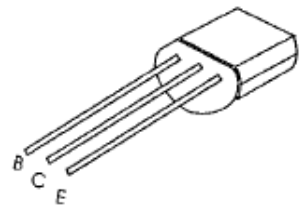
APPLICATION

▲FLUORESCENT LAMP ▲ELECTRONIC TRANSFORMER

▲ELECTONIC TRANSFORMER ▲SWICH MODE POWER SUPPLY

● 最大额定值 Absolute Maximum Ratings (Tc=25°C)

| 参数<br>PARAMETER                          | 符号<br>SYMBOL      | 额定值<br>VALUE | 单位<br>UNIT |
|--|-------------------|--------------|------------|
| 集电极-基极电压 Collector-Base Voltage          | V <sub>CB0</sub>  | 400          |            |
| 集电极-发射极电压 Collector-Emitter Voltage      | V <sub>CEO</sub>  | 200          | V          |
| 发射极-基极电压 Emitter-Base Voltage            | V <sub>EBO</sub>  | 9            | V          |
| 集电极电流 Collector Current                  | I <sub>C</sub>    | 1.5          | A          |
| 集电极耗散功率 Total Power Dissipation @TC=25°C | P <sub>DTOT</sub> | 11           | W          |
| 最高工作温度 Junction Temperature              | T <sub>J</sub>    | 150          | °C         |
| 贮存温度 Storage Temperature                 | T <sub>STG</sub>  | -65-150      | °C         |



TO-92

● 电特性 Electronic Characteristics (Tc=25°C)

| 参数名称<br>CHARACTERISTICS                             | 符号<br>SYMBOL       | 测试条件<br>TEST CONDITION                    | 最小值<br>MIN | 最大值<br>MAX | 单位<br>UNIT |
|---|--------------------|---|------------|------------|------------|
| 集电极-基极截至电流<br>Collector-Base Cutoff Current         | I <sub>CB0</sub>   | V <sub>CB</sub> =400V I <sub>E</sub> =0   |            | 100        | µA         |
| 集电极-发射极截至电流<br>Collector-Emitter Cutoff Current     | I <sub>CEO</sub>   | V <sub>CE</sub> =200V I <sub>B</sub> =0   |            | 100        | uA         |
| 发射极-基极截至电流<br>Emitter-Base Cutoff Current           | I <sub>EBO</sub>   | V <sub>EB</sub> =9V, I <sub>C</sub> =0    |            | 100        | uA         |
| 集电极-基极打压<br>Collector-Base Voltage                  | BV <sub>CB0</sub>  | I <sub>C</sub> =1mA, I <sub>B</sub> =0    | 400        |            | V          |
| 集电极-发射极电压<br>Collector-Emitter Voltage              | BV <sub>CEO</sub>  | I <sub>C</sub> =10mA, I <sub>E</sub> =0   | 200        |            | V          |
| 发射极-基极电压<br>Emitter-Base Voltage.                   | BV <sub>EBO</sub>  | I <sub>C</sub> =1mA, I <sub>C</sub> =0    | 9          |            | V          |
| 集电极-发射极饱和电压<br>Collector-Emitter Saturation Voltage | V <sub>cesat</sub> | I <sub>C</sub> =1A I <sub>b</sub> =0.5A   |            | 1.5        | V          |
|   |                    | I <sub>C</sub> =0.5A I <sub>b</sub> =0.1A |            | 0.5        | V          |
| 基极-发射极饱和电压<br>Base-Emitter Saturation Voltage       | V <sub>besat</sub> | I <sub>C</sub> =1A I <sub>b</sub> =0.5A   |            | 1.5        | V          |
| 电流放大倍数 DC Current Gain                              | HFE                | I <sub>C</sub> =0.1A V <sub>CE</sub> =5V  | 10         | 40         |            |
|   |                    | I <sub>C</sub> =1mA V <sub>CE</sub> =5V   | 7          |            |            |
| 贮存时间 Storage Time                                   | T <sub>s</sub>     | I <sub>C</sub> =0.25A (UI9600)            | 1.5        | 3.5        | us         |



## ●放大倍数和 Ts 分档 CLASSIFICATION OF HFE AND TS

|     |       |       |       |       |
|-----|-------|-------|-------|-------|
| HFE | 10-15 | 15-20 | 20-25 | 25-30 |
|-----|-------|-------|-------|-------|

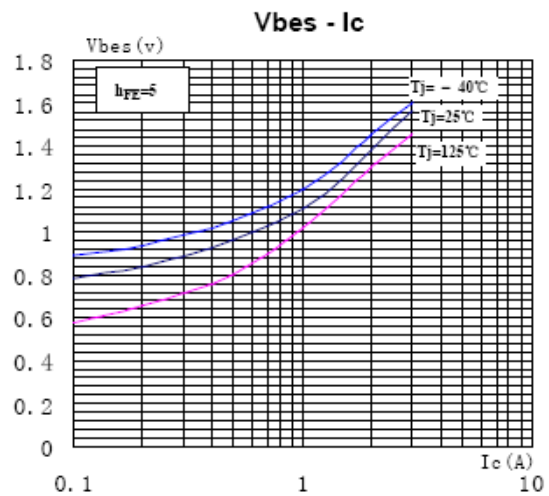
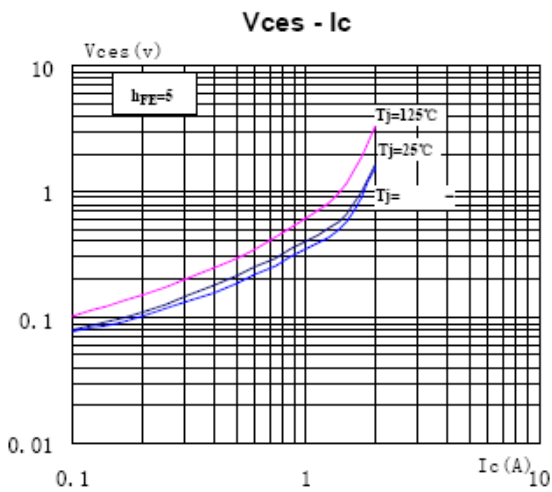
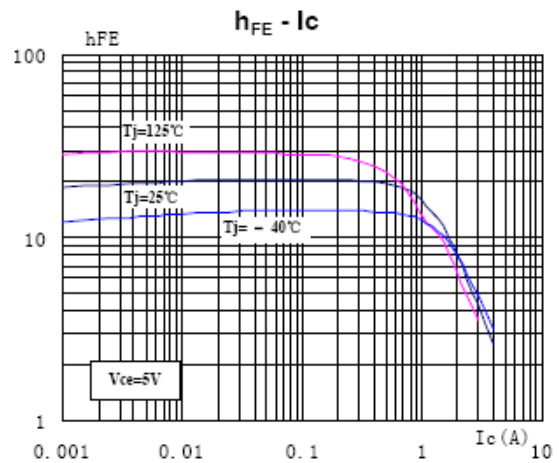
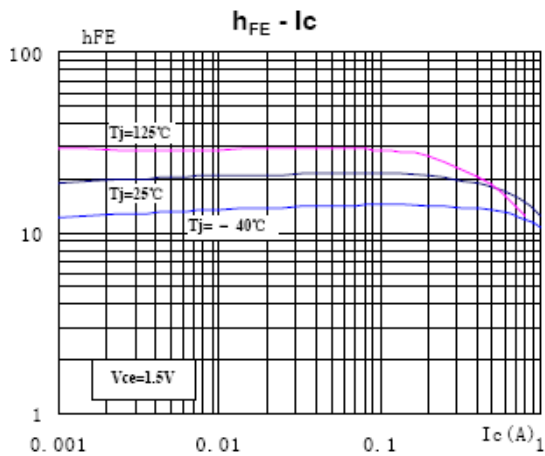
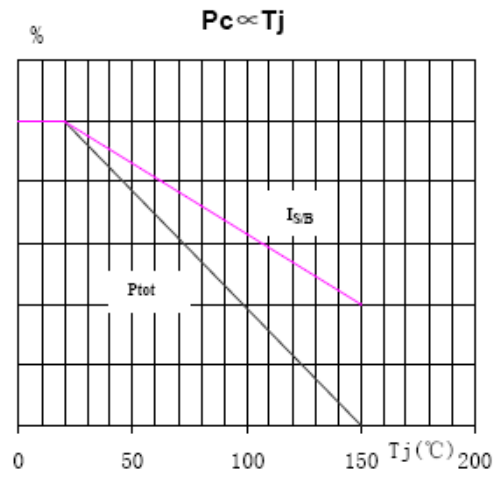
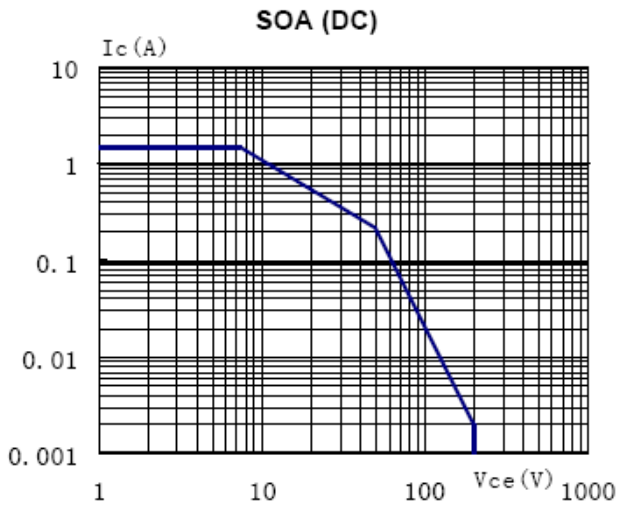
|    |         |         |         |         |
|----|---------|---------|---------|---------|
| TS | 1.5-2.0 | 2.0-2.5 | 2.5-3.0 | 3.0-3.5 |
|----|---------|---------|---------|---------|

## ●The name and content of poisonous and harmful material in prouducts

| 部件名称<br>Part's Name<br>含量要求<br>CONTENT | 有毒有害物质或元素 hazardous substance   |         |         |             |             |               |
|--|---|---------|---------|-------------|-------------|---------------|
|  | 铅<br>Pb   | 汞<br>Hg | 镉<br>Cd | 铬<br>Cr(VI) | 多溴联苯<br>PBB | 多溴二苯醚<br>PBDE |
|  | ≤0.1%   | ≤0.1%   | ≤0.01%  | ≤0.1%       | ≤0.1%       | ≤0.1%         |
| 引线<br>Lead Frame                       | ○   | ○       | ○       | ○           | ○           | ○             |
| 塑封树脂<br>Moding Compound                | ○   | ○       | ○       | ○           | ○           | ○             |
| 芯片<br>Chip                             | ○   | ○       | ○       | ○           | ○           | ○             |
| 焊线<br>Wire Bonding                     | ○   | ○       | ○       | ○           | ○           | ○             |
| 焊料<br>Solder                           | ×   | ○       | ○       | ○           | ○           | ○             |
| 说明<br>Note                             | <p>○：表示该元素的含量在 SJ/T11363-2006 标准的限量要求一下<br/>○： means the hazardous material is under the criterion of SJ/T11363-2006.<br/>×：表示该元素的焊料超出 SJ/T11363-2006 标准的限量要求。<br/>×： means the hazardous material exceeds the criterion of SJ/T11363-2006.<br/>目前产品的焊料中含有铅成分，但属于欧盟 RoHS 指令豁免范围。<br/>The plumbum element of solder exist in products presently, but within the allowed range of Eurogroup's ROHS.</p> |         |         |             |             |               |



●特性曲线 TYPICAL CHARACTERISTICS





●机械尺寸 MECHANICAL DIMENSIONS

TO-92 MECHANICAL DATA

| SYMBOL | Min  | Nom  | Max |
|--------|------|------|-----|
| A      | 4.3  |      | 5.3 |
| b      | 0.3  |      |     |
| c      | 0.3  |      |     |
| D      | 4.3  |      | 5.2 |
| d      | 1.0  |      | 1.7 |
| E      | 3.2  |      | 4.2 |
| e      |      | 2.54 |     |
| e1     |      | 1.27 |     |
| L      | 12.7 |      |     |
| L1     |      |      | 2.0 |

