

MJE13003L6 (3DD13003L6)

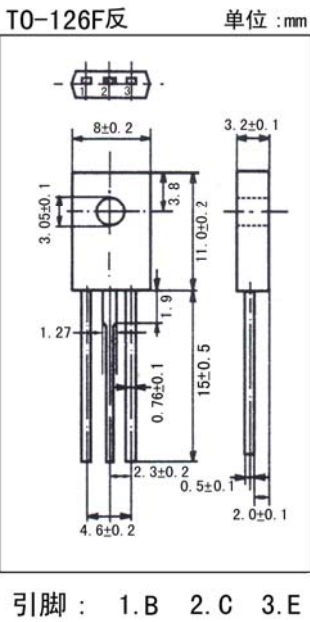
硅 NPN 半导体三极管/SILICON NPN TRANSISTOR

用途：主要用于节能灯、日光灯电子镇流器及其它开关、振荡电路。

Purpose: High frequency electronic lighting ballast applications, converters, inverters, switching regulators, etc.

极限参数/Absolute maximum ratings(Ta=25℃)

| 参数符号<br>Symbol        | 数值<br>Rating | 单位<br>Unit |
|-----------------------|--------------|------------|
| $V_{CB0}$             | 900          | V          |
| $V_{CE0}$             | 530          | V          |
| $V_{EB0}$             | 9.0          | V          |
| $I_C$                 | 1.5          | A          |
| $I_{CP}$              | 3.0          | A          |
| $P_C(Ta=25^{\circ}C)$ | 1.25         | W          |
| $P_C(Tc=25^{\circ}C)$ | 50           | W          |
| $T_j$                 | 150          | ℃          |
| $T_{stg}$             | -55~150      | ℃          |

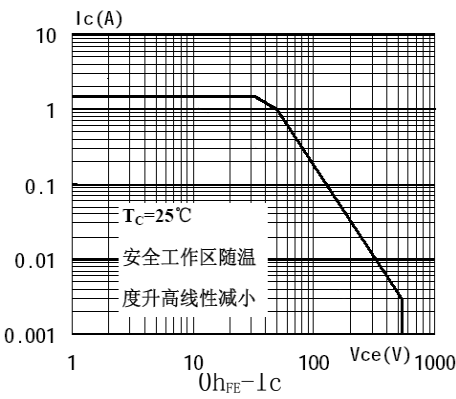


电性能参数/Electrical characteristics(Ta=25℃)

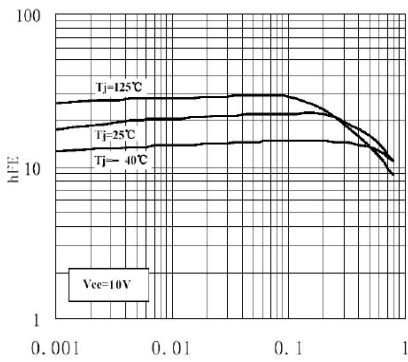
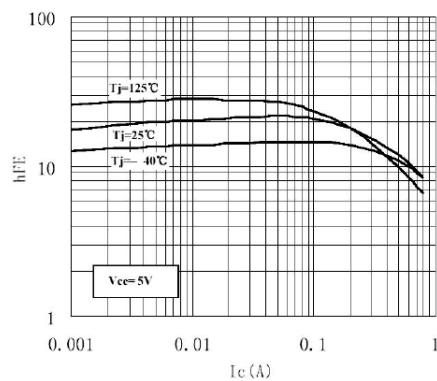
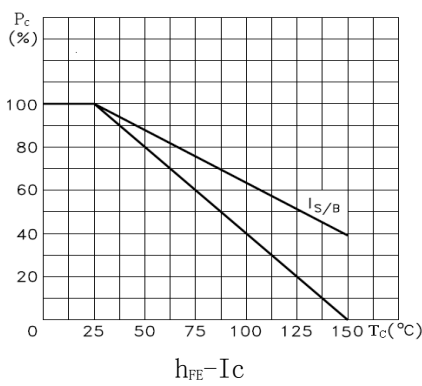
| 参数符号<br>Symbol   | 测试条件<br>Test condition              | 数值<br>Rating |            |            | 单位<br>Unit |
|------------------|-------------------------------------|--------------|------------|------------|------------|
|                  |                                     | 最小值<br>Min   | 典型值<br>Typ | 最大值<br>Max |            |
| $V_{CB0}$        | $I_C=1mA$ $I_E=0$                   | 900          |            |            | V          |
| $V_{CE0}$        | $I_C=10mA$ $I_B=0$                  | 530          |            |            | V          |
| $V_{EB0}$        | $I_E=1mA$ $I_C=0$                   | 9            |            |            | V          |
| $I_{CB0}$        | $V_{CB}=900V$ $I_E=0$               |              |            | 0.1        | mA         |
| $I_{CE0}$        | $V_{CE}=530V$ $I_B=0$               |              |            | 0.1        | mA         |
| $I_{EB0}$        | $V_{EB}=9.0V$ $I_C=0$               |              |            | 0.1        | mA         |
| $h_{FE(1)}$      | $V_{CE}=10V$ $I_C=0.4A$             | 10           |            | 40         |            |
| $h_{FE(2)}$      | $V_{CE}=10V$ $I_C=1.0mA$            | 15           |            |            |            |
| $h_{FE(3)}$      | $V_{CE}=10V$ $I_C=1.0A$             | 6            |            | 40         |            |
| $V_{CE(sat)(1)}$ | $I_C=0.5A$ $I_B=0.1A$               |              |            | 0.8        | V          |
| $V_{CE(sat)(2)}$ | $I_C=1.5A$ $I_B=0.5A$               |              |            | 2.5        | V          |
| $V_{BE(sat)}$    | $I_C=0.5A$ $I_B=0.1A$               |              |            | 1.2        | V          |
| $f_T$            | $V_{CE}=10V$ $I_C=0.1A$ $f=1.0MHz$  | 5.0          |            |            | MHz        |
| $t_f$            | $V_{CE}=5V$ $I_C=0.25A$<br>(UI9600) |              |            | 1.2        | μs         |
| $t_s$            |                                     |              |            | 5.0        | μs         |

MJE13003L6 (3DD13003L6)

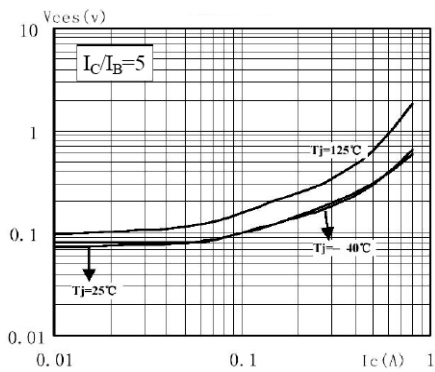
SOA (DC)



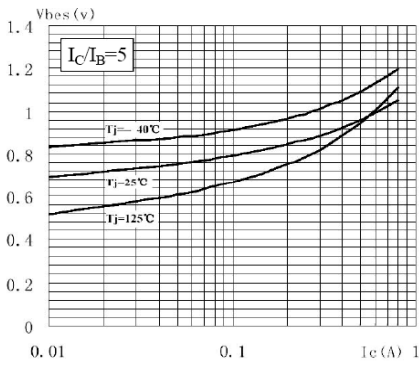
$P_C-T_C$



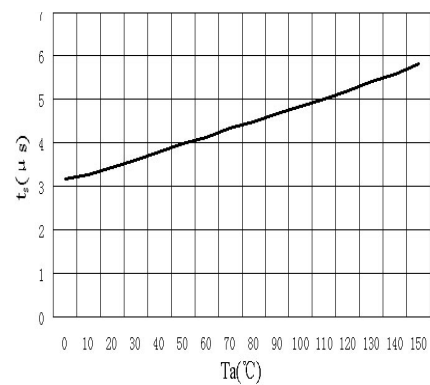
$V_{CES}-I_C$



$V_{BES}-I_C$



$t_s-T_a$



$h_{FE}-T_a$

