

# TDSEMIC

## 拓電半導體

自主封測 品質把控 售後保障

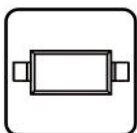
WEB | [WWW.TDSEMIC.COM](http://WWW.TDSEMIC.COM)



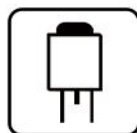
電源管理



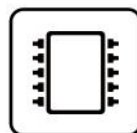
顯示驅動



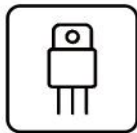
二三極管



LDO穩壓器



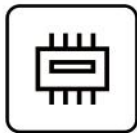
觸摸芯片



MOS管



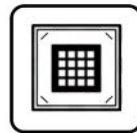
運算放大器



存儲芯片



MCU



串口通信

# SS8050 Y1-TD (0.52)

產品規格說明書

## FEATURES:

- ※ Complementary to SS8550
- ※ Collector Current:  $I_c=1.5A$

## MARKING:Y1

### MAXIMUM RATINGS ( $T_a=25^{\circ}C$ unless otherwise noted)

| Parameter                                   | Symbol | Value    | Unit          |
|---------------------------------------------|--------|----------|---------------|
| Collector-Base Voltage                      | VCBO   | 40       | V             |
| Collector-Emitter Voltage                   | VCEO   | 25       | V             |
| Emitter-Base Voltage                        | VEBO   | 5        | V             |
| Collector Current                           | IC     | 1500     | mA            |
| Collector Power Dissipation                 | PC     | 300      | mW            |
| Thermal Resistance From Junction To Ambient | ROJA   | 417      | $^{\circ}C/W$ |
| Junction Temperature                        | Tj     | 150      | $^{\circ}C$   |
| Storage Temperature                         | Tstg   | -55~+150 | $^{\circ}C$   |

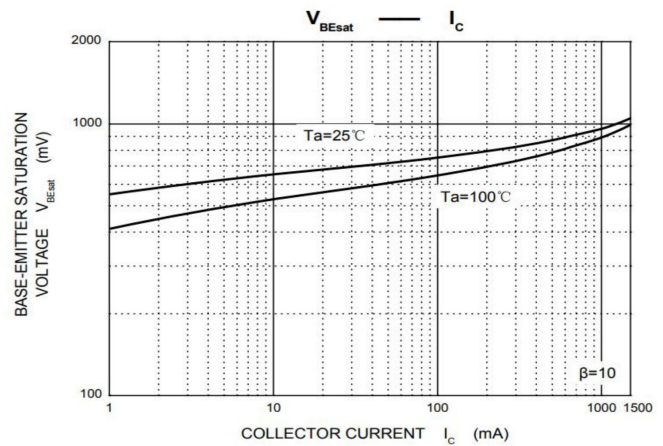
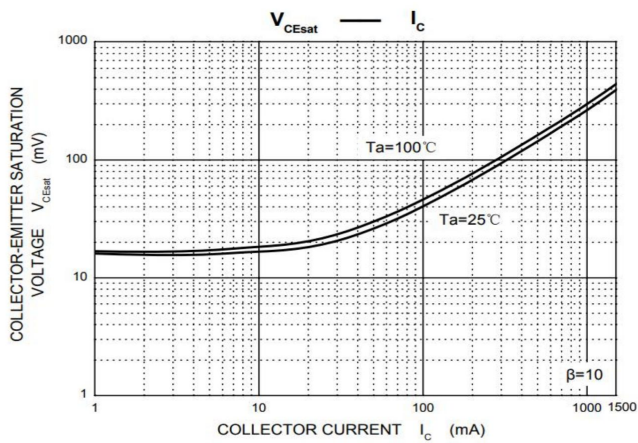
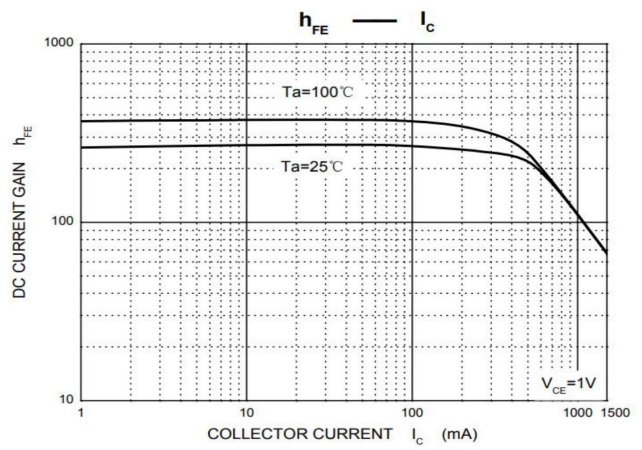
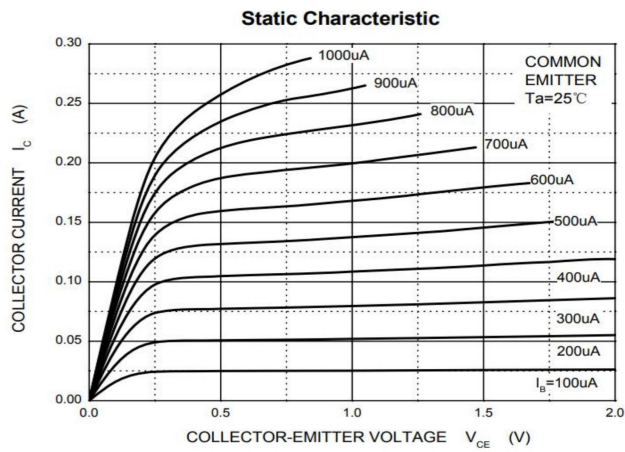
### ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}C$ unless otherwise specified)

| Parameter                            | Symbol   | Test Condition               | Min | Typ | Max | Unit    |
|--------------------------------------|----------|------------------------------|-----|-----|-----|---------|
| Collector-base breakdown voltage     | V(BR)CBO | IC= 100 $\mu$ A, IE=0        | 40  |     |     | V       |
| Collector-emitter breakdown voltage  | V(BR)CEO | IC= 0.1mA, IB=0              | 25  |     |     | V       |
| Emitter-base breakdown voltage       | V(BR)EBO | IE=100 $\mu$ A, IC=0         | 5   |     |     | V       |
| Collector cut-off current            | ICBO     | VCB=40 V , IE=0              |     |     | 0.1 | $\mu$ A |
| Collector cut-off current            | ICEO     | VCB=25V , IE=0               |     |     | 0.1 | $\mu$ A |
| Emitter cut-off current              | IEBO     | VEB= 5V , IC=0               |     |     | 0.1 | $\mu$ A |
| DC current gain                      | hFE      | VCE=1V, IC= 100mA            | 120 |     | 400 |         |
|                                      | hFE      | VCE=1V, IC= 800mA            | 40  |     |     |         |
| Collector-emitter saturation voltage | VCE(sat) | IC=500 mA, IB= 50mA          |     |     | 0.5 | V       |
| Base-emitter saturation voltage      | VBE(sat) | IC=500 mA, IB= 50mA          |     |     | 1.2 | V       |
| Transition frequency                 | fT       | VCE=10V, IC= 50mA<br>f=30MHz | 100 |     |     | MHz     |

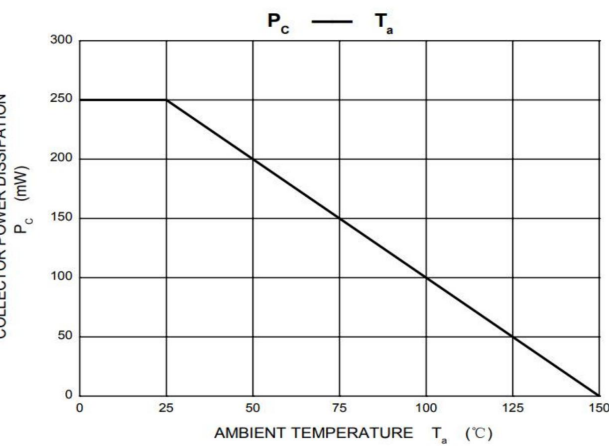
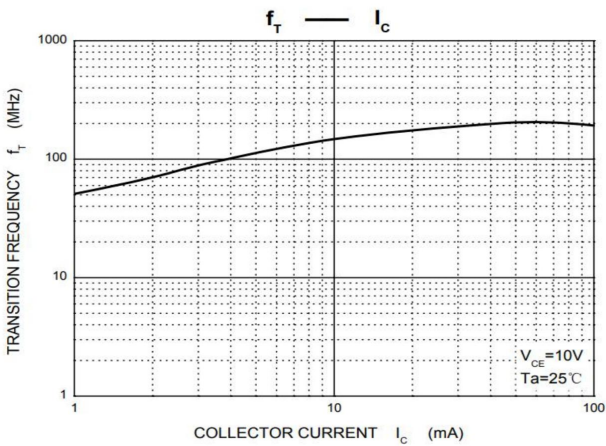
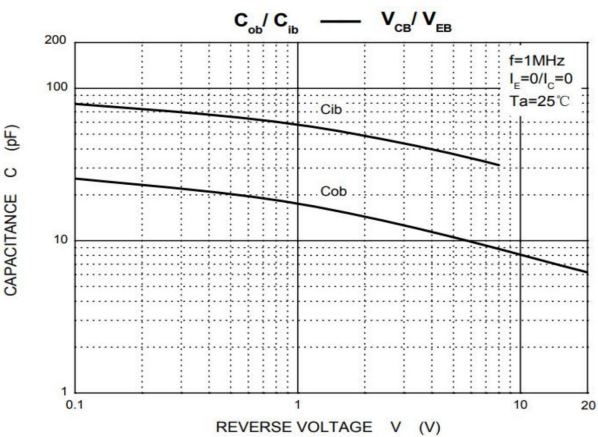
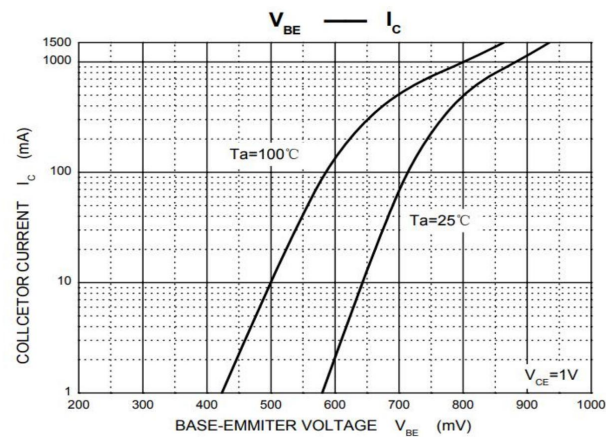
### CLASSIFICATION OF hFE

| Rank  | L       | H       | J       |
|-------|---------|---------|---------|
| Range | 120-200 | 200-350 | 300-400 |

## Typical Electrical and Thermal Characteristics

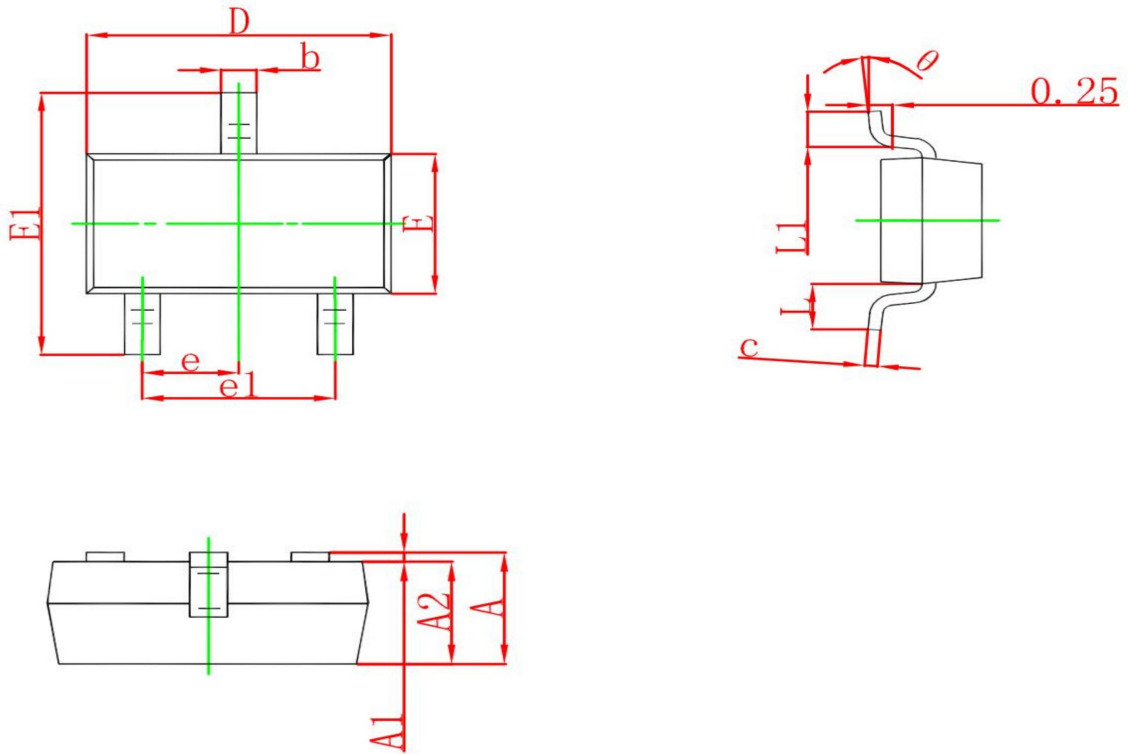


Typical Electrical and Thermal Characteristics





## SOT-23 Package Outline Dimesions



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min.                      | Max.  | Min.                 | Max.  |
| A      | 0.900                     | 1.150 | 0.035                | 0.045 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.900                     | 1.050 | 0.035                | 0.041 |
| b      | 0.300                     | 0.500 | 0.012                | 0.020 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 2.800                     | 3.000 | 0.110                | 0.118 |
| E      | 1.200                     | 1.400 | 0.047                | 0.055 |
| E1     | 2.250                     | 2.550 | 0.089                | 0.100 |
| e      | 0.950 TYP                 |       | 0.037 TYP            |       |
| e1     | 1.800                     | 2.000 | 0.071                | 0.079 |
| L      | 0.550 REF                 |       | 0.022 REF            |       |
| L1     | 0.300                     | 0.500 | 0.012                | 0.020 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |





















