



# FUKUCOM COMPANY LTD.

## 福 靈 有 限 公 司

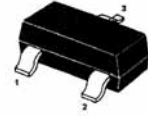
FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

### S8550LT1

#### PNP Epitaxial Silicon Transistor

- Complement to S8050LT1
- Collector Current:  $I_C = -500\text{mA}$
- High Total Poer Dissipation:  $P_c = 225\text{mW}$



1. Base 2. Emitter 3. Collector  
SOT-23 Plastic Package

#### Absolute Maximum Ratings $T_a = 25^\circ\text{C}$ unless otherwise noted

| Symbol    | Characteristic                                   | Value   | Units            |
|-----------|--|---------|------------------|
| $V_{CBO}$ | Collector-Base Voltage                           | -40     | V                |
| $V_{CEO}$ | Collector-Emitter Voltage                        | -25     | V                |
| $V_{EB}$  | Emitter-Base Voltage                             | -6      | V                |
| $I_C$     | Collector Current                                | -500    | mA               |
| $P_D$     | Collector Dissipation $T_a = 25^\circ\text{C}^*$ | 225     | mW               |
| $T_J$     | Junction Temperature                             | 150     | $^\circ\text{C}$ |
| $T_{STG}$ | Storage Temperature                              | -55~150 | $^\circ\text{C}$ |

#### Electrical Characteristics $T_a = 25^\circ\text{C}$ unless otherwise noted

| Symbol        | Characteristic                                   | Test Condition  | Min.       | Typ.  | Max.       | Units            |
|---------------|--|---|------------|-------|------------|------------------|
| $BV_{CBO}$    | Collector-Base Breakdown Voltage                 | $I_C = -100\ \mu\text{A}, I_E = 0$  | -40        |       |            | V                |
| $BV_{CEO}$    | Collector-Emitter Breakdown Voltage <sup>#</sup> | $I_C = -1\text{mA}, I_B = 0$  | -25        |       |            | V                |
| $BV_{EBO}$    | Emitter-Base Breakdown Voltage                   | $I_E = -100\ \mu\text{A}, I_C = 0$  | -6         |       |            | V                |
| $I_{CBO}$     | Collector-Base Cutoff Current                    | $V_{CB} = -35\text{V}, I_E = 0\text{V}$   |            |       | -100       | $\eta\ \text{A}$ |
| $I_{EBO}$     | Emitter-Base Cutoff Current                      | $V_{EB} = -6\text{V}, I_C = 0$  |            |       | -100       | $\eta\ \text{A}$ |
| $h_{FE}$      | DC Current Gain<br>Group C<br>Group D            | $V_{CE} = -1\text{V}, I_C = -50\text{mA}$   | 120<br>180 |       | 200<br>300 |                  |
| $h_{FE}$      | DC Current Gain                                  | $V_{CE} = -1\text{V}, I_C = -5\text{mA}$<br>$V_{CE} = 1\text{V}, I_C = -500\text{mA}$ | 45<br>30   |       |            |                  |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage             | $I_C = -500\text{mA}, I_B = -50\text{mA}$   |            | -0.28 | -0.5       | V                |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage                  | $I_C = -500\text{mA}, I_B = -50\text{mA}$   |            | -0.98 | -1.2       | V                |
| $V_{BE(ON)}$  | Base-Emitter On Voltage                          | $V_{CE} = -1\text{V}; I_C = -10\text{mA}$   |            |       | 1.0        | V                |
| $C_{OB}$      | Output Capacitance                               | $V_{CB} = -10\text{V}; I_E = 0\ \text{f} = \text{MHz}$                                |            | 15    |            | pf               |
| $f_T$         | Current Gain-Bandwidth Product                   | $V_{CE} = -10\text{V}, I_C = -50\text{mA}$  | 100        | 190   |            | MHz              |

Marking : B6(Group)

\* Total Device Dissipation :  $FR = 1 \times 0.75 \times 0.062$  in Board, Derate  $25^\circ\text{C}$

# Pulse Test : Pulse Width  $\leq 300\ \mu\text{s}$ , Duty cycle  $\leq 2\%$



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### S8050LT1

