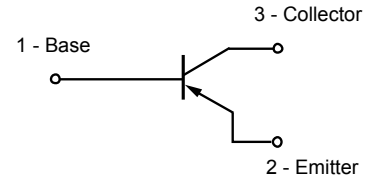


## Feature

- This device is Pb-Free, Halogen Free/BFR Free and Rohs compliant.



## Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um
- Pin flatness : ≤3mil

## Structure

PNP epitaxial planar silicon transistor (Resistor built-in type)

## Electrical characteristics per line@25°C ( unless otherwise specified)

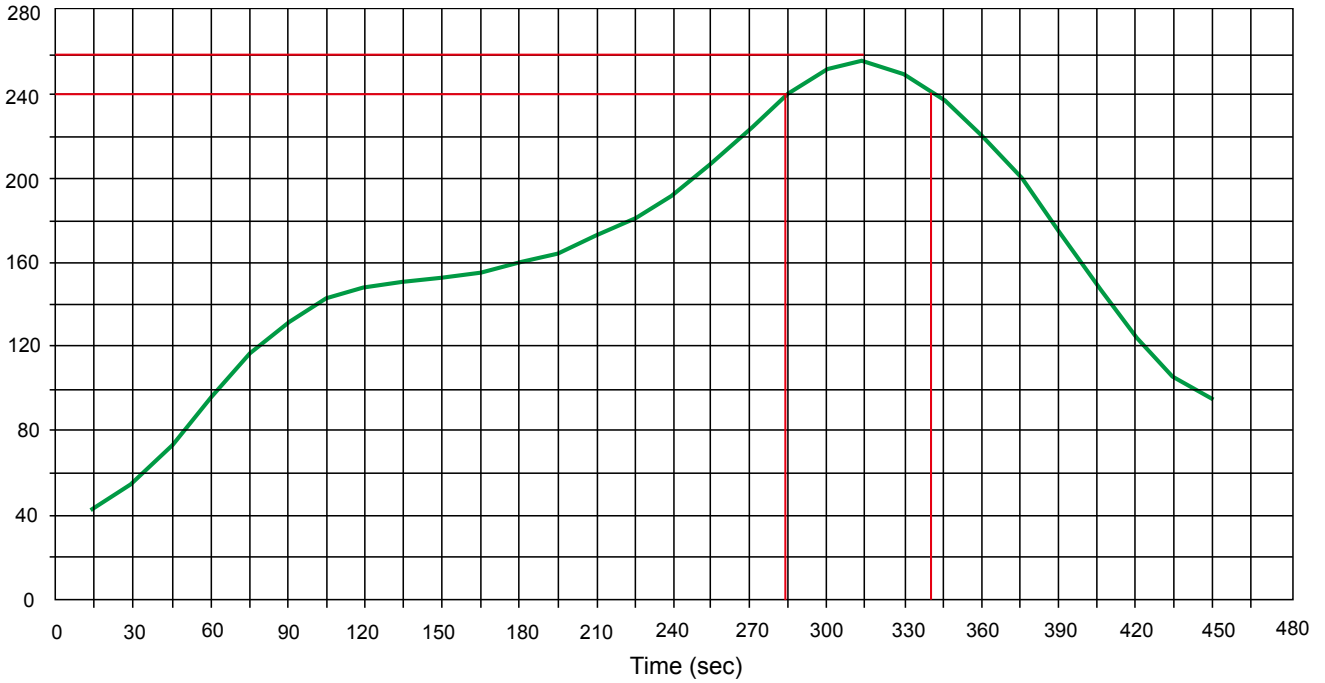
| Parameter                           | Symbol        | Conditions          | Min. | Typ. | Max. | Units |
|-------------------------------------|---------------|---------------------|------|------|------|-------|
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=-1.0mA, I_B=0$ | -25  |      |      | V     |
| Collector-Base Breakdown Voltage    | $V_{(BR)CBO}$ | $I_C=-10uA, I_E=0$  | -10  |      |      | V     |
| Emitter -Base Breakdown Voltage     | $V_{(BR)EBO}$ | $I_E=-10uA, I_C=0$  | -6.0 |      |      | V     |
| Collector Cutoff Current            | $I_{CBO}$     | $V_{CB}=-35V$       |      |      | -50  | nA    |
| Collector Current                   | $I_C$         |                     |      | 0.8  |      | A     |

## Absolute maximum rating@25°C

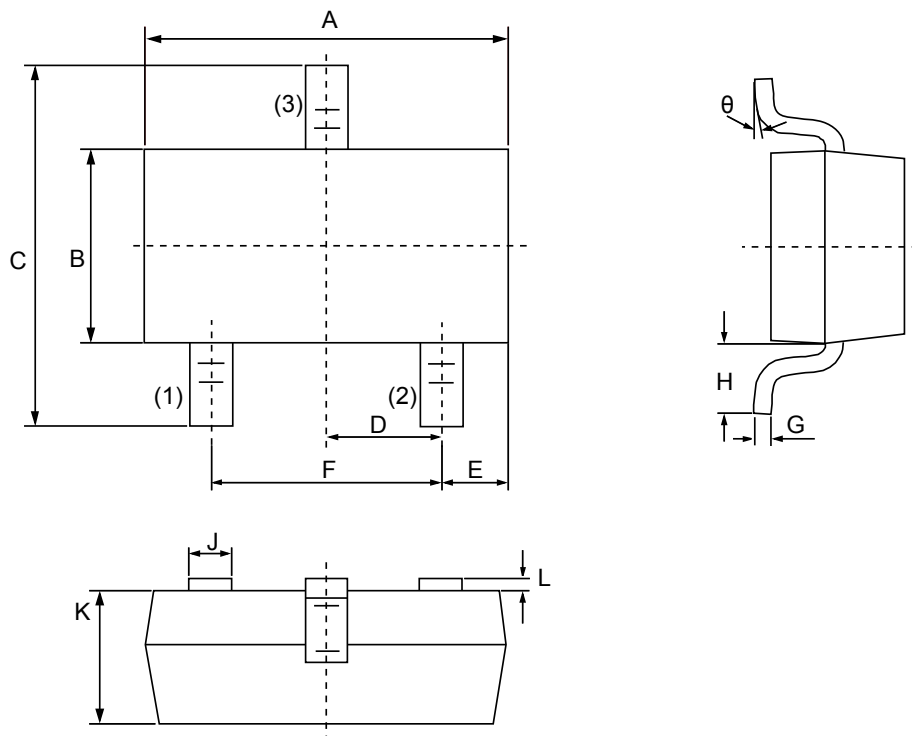
| Parameter                            | Symbol        | Conditions                 | Min. | Typ. | Max. | Units |
|--------------------------------------|---------------|----------------------------|------|------|------|-------|
| DC Current Gain                      | $H_{FE}$      | $I_C=-100mA, V_{CE}=-1.0V$ | 100  |      | 250  | -     |
|                                      |               | $I_C=-500mA, V_{CE}=-1.0V$ | 40   |      | -    |       |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-500mA, I_B=-50mA$    | -    |      | -0.5 | V     |
| Base-Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C=-500mA, I_B=-50mA$    |      |      | -1.2 | V     |

Solder Reflow Recommendation

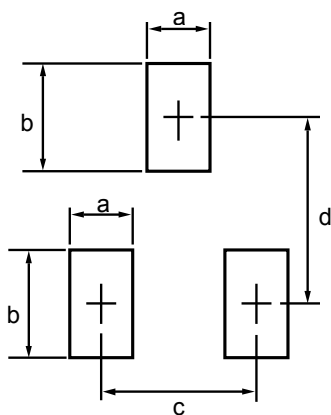
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension(SOT-23)



| Dim      | Millimeters |       | Inches |        |
|----------|-------------|-------|--------|--------|
|          | MIN         | MAX   | MIN    | MAX    |
| A        | 2.80        | 3.00  | 0.1102 | 0.1197 |
| B        | 1.20        | 1.40  | 0.0472 | 0.0551 |
| C        | 2.10        | 2.50  | 0.0830 | 0.0984 |
| D        | 0.89        | 1.02  | 0.0350 | 0.0401 |
| E        | 0.45        | 0.60  | 0.0177 | 0.0236 |
| F        | 1.78        | 2.04  | 0.0701 | 0.0807 |
| G        | 0.085       | 0.177 | 0.0034 | 0.0070 |
| H        | 0.45        | 0.60  | 0.0180 | 0.0236 |
| J        | 0.37        | 0.50  | 0.0150 | 0.0200 |
| K        | 0.89        | 1.11  | 0.0350 | 0.0440 |
| L        | 0.013       | 0.100 | 0.0005 | 0.0040 |
| $\theta$ | 0°          | 10°   | 0°     | 10°    |




| Dim | Millimeters |      |
|-----|-------------|------|
|     | MIN         | MAX  |
| a   | --          | 0.7  |
| b   | --          | 1.2  |
| c   | --          | 2.04 |
| d   | --          | 2.2  |

Ordering information

| Device    | Package          | Shipping           |
|-----------|------------------|--------------------|
| PT23T8550 | SOT-23 (Pb-Free) | 3000 / Tape & Reel |


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