

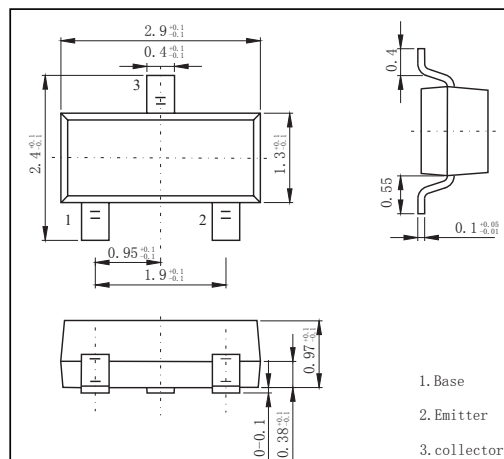
## SOT-23 Plastic-Encapsulate Transistors

### FEATURES

- High voltage and high current
- $V_{CEO} = -50V(\text{min.}), I_C = -150mA(\text{max.})$
- Low noise:  $NF = 1dB(\text{Typ.})$  at  $f = 1KHz$
- PNP TRANSISTORS
- Collector-Base Voltage:  $V_{CBO} = -60V$

### MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting position: any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter                     | Symbol    | Rating     | Unit |
|-------------------------------|-----------|------------|------|
| Collector-Base Voltage        | $V_{CBO}$ | -50        | V    |
| Collector-Emitter Voltage     | $V_{CEO}$ | -50        | V    |
| Emitter-Base Voltage          | $V_{EBO}$ | -5         | V    |
| Collector Current -Continuous | $I_C$     | -150       | mA   |
| Collector Power Dissipation   | $P_C$     | 200        | mW   |
| Junction Temperature          | $T_J$     | 150        | °C   |
| Storage Temperature           | $T_{stg}$ | - 55 ± 150 | °C   |

| Parameter                            | Symbol        | Test Conditions                        | Min | Typ | Max  | Unit    |
|--------------------------------------|---------------|----------------------------------------|-----|-----|------|---------|
| Collector-base breakdown voltage     | $V_{CBO}$     | $I_C = -100 \mu A, I_E = 0$            | -50 |     |      | V       |
| Collector-emitter breakdown voltage  | $V_{CEO}$     | $I_C = -0.1mA, I_B = 0$                | -50 |     |      | V       |
| Emitter-base breakdown voltage       | $V_{EBO}$     | $I_E = -100 \mu A, I_C = 0$            | -5  |     |      | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB} = -50V, I_E = 0$               |     |     | -0.1 | $\mu A$ |
| Collector cut-off current            | $I_{CEO}$     | $V_{CE} = -50V, I_B = 0$               |     |     | -0.1 | $\mu A$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB} = -5V, I_C = 0$                |     |     | -0.1 | $\mu A$ |
| DC current gain                      | $h_{FE}$      | $V_{CE} = -6V, I_C = -2mA$             | 130 |     | 400  |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -100 mA, I_B = -10mA$           |     |     | -0.3 | V       |
| Base-emitter saturation voltage      | $V_{BE(sat)}$ | $I_C = -100 mA, I_B = -10mA$           |     |     | -1.1 | V       |
| Transition frequency                 | $f_T$         | $V_{CE} = -10V, I_C = -1mA, f = 30MHz$ | 80  |     |      | MHz     |