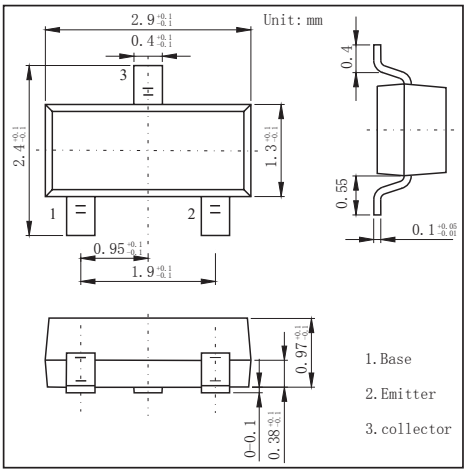
# SOT-23 Plastic-Encapsulate Transistors

## FEATURES

- General small signal amplifier
- High $h_{FE}$=100~320
- TRANSISTOR NPN

## MECHANICAL DATA

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




## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter | Symbol | Value | Units |
|---|---|---|---|
| Collector-Base Voltage | $V_{CBO}$ | 35 | |
| Collector-Emitter Voltage | $V_{CEO}$ | 30 | |
| Emitter-Base Voltage | $V_{EBO}$ | 5 | |
| Collector Current -Continuous | $I_C$ | 800 | mA |
| Collector Dissipation | $P_C$ | 200 | mW |
| Junction and Storage Temperature | $T_j$,$T_{stg}$ | -55 to +150 | |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C$=100μA,$I_E$=0 | 35 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C$=1mA,$I_E$=0 | 30 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E$=10μA,$I_C$=0 | 5 | | | V |
| Collector cut-off current | $I_{CBO}$ | $V_{CB}$=35V,$I_E$=0 | | | 0.1 | μA |
| Emitter cut-off current | $I_{EBO}$ | $V_{EB}$=5V,$I_C$=0 | | | 0.1 | μA |
| DC current gain | $h_{FE}$ | $V_{CE}$=1V,$I_C$=100mA | 100 | | 320 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C$=500mA, $I_B$=50mA | | | 0.5 | V |
| Transition frequency | $f_T$ | $V_{CE}$=5V, $I_C$= 10mA | | 120 | | MHz |
| Output capacitance | $C_{ob}$ | $V_{CB}$=10V, $I_E$=0,f=1MHz | | 13 | | pF |