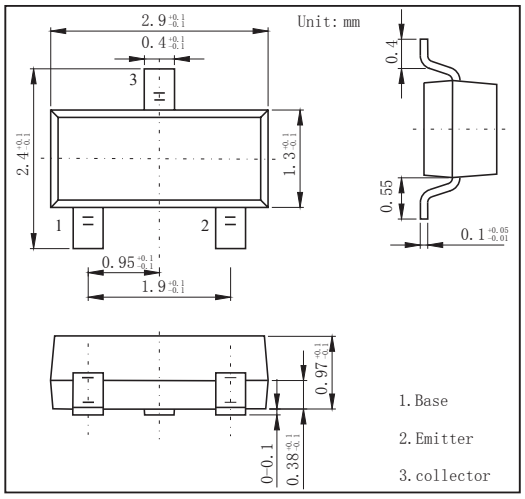
## SOT-23 Plastic-Encapsulate Transistors

## FEATURES

- Low Collector-to-Emitter Saturation Voltage
- Fast Switching Speed
- NPN Transistors

## MECHANICAL DATA

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




## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | 60 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | 50 | V |
| Emitter to Base Voltage | $V_{EBO}$ | 5 | V |
| Collector Current to Continuous | $I_C$ | 150 | mA |
| Collector Power Dissipation | $P_C$ | 200 | mW |
| Junction Temperature | $T_j$ | 125 | ℃ |
| Storage Temperature | $T_{stg}$ | -55~+150 | ℃ |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector to base breakdown voltage | VCBO | Ic= 100 A, IE=0 | 60 | | | V |
| Collector to emitter breakdown voltage | VCEO | Ic= 0 . 1 m A , I B=0 | 50 | | | V |
| Collector cut to off current | ICBO | VCB=60V, IE=0 | | | 0.1 | A |
| Collector cut to off current | ICEO | VCE=40V, IB=0 | | | 1 | A |
| Emitter cut to off current | IEBO | VEB= 5 V , I C=0 | | | 0.1 | A |
| DC current gain | hFE | VCE= 6 V , I C= 2mA | 130 | | 400 | |
| Collector to emitter saturation voltage | VCE(sat) | IC=100 mA, IB= 10mA | | | 0.25 | V |
| Base to emitter saturation voltage | VBE(sat) | IC=100 mA, IB= 10mA | | | 1 | V |
| Transition frequency | fT | VCE=10V, IC= 1mA,f=30MHz | 80 | | | MHz |

# RATINGS AND CHARACTERISTIC CURVES