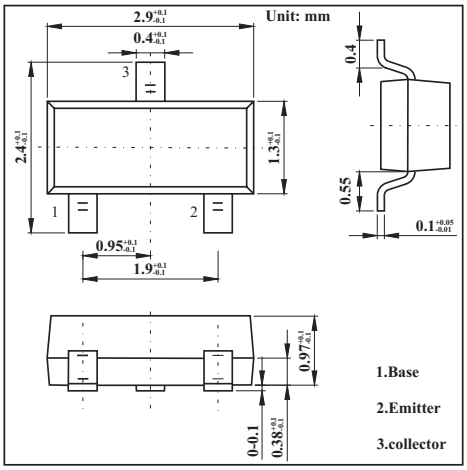
# SOT-23 Plastic-Encapsulate Transistors

## FEATURES

- Low collector saturation voltage: $V_{CE}$=0.25V(Max.)
- Low output capacitance:$C_{ob}$=2pF(Typ.)
- 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 | Rating | Unit |
|---|---|---|---|
| Collector-base voltage | VCBO | 60 | V |
| Collector-emitter voltage | VCEO | 50 | V |
| Emitter-base voltage | VEBO | 5 | V |
| Collector current | IC | 150 | mA |
| Collector dissipation | PC | 200 | mW |
| Junction temperature | Tj | 150 | ℃ |
| Storage temperature | Tstg | - 5 5 t o + 1 5 0 | ℃ |

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector-base breakdown voltage | BVCBO | IC=100ìA , IE=0 | 60 | | | V |
| Collector-emitter breakdown voltage | BVCEO | IC=1mA , IB=0 | 50 | | | V |
| Emitter-base breakdown voltage | BVEBO | IE=10ìA, IC=0 | 5 | | | V |
| Collector cutoff current | ICBO | VCB=60V, IE=0 | | | 0.1 | ìA |
| Emitter cutoff current | IEBO | VEB=5V, IC=0 | | | 0.1 | ìA |
| DC current transfer ratio | hFE | VCE=6V, IC=2mA | 70 | | 700 | |
| Collector-emitter saturation voltage | VCE(sat) | IC/IB=100mA/10mA | | | 0.25 | V |
| Transition frequency | fT | VCE=10V, IC=1mA, | 80 | | | MHz |
| Output capacitance | Cob | VCB=10V, IE=0, f=1MHz | | 2 | 3.5 | pF |
| Noise figure | NF | VCE=6V, IC=0.1mA, f=1KHz, Rg=10kÙ | | | 10 | dB |