

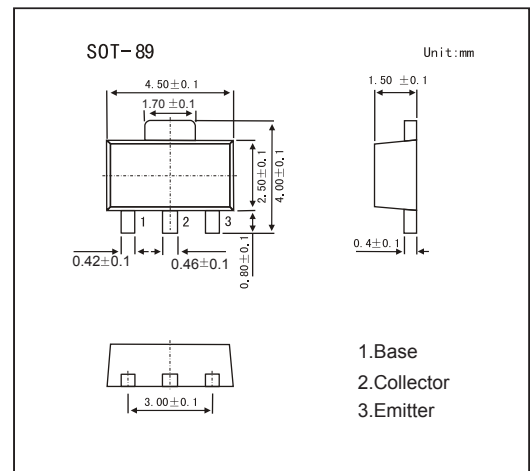
SOT-89 Plastic-Encapsulate Transistors

FEATURES

- High voltage: $V_{CEO}=160V$
- Large continuous collector current
- NPN Transistors

MECHANICAL DATA

- Case style:SOT-89 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} | 160 | V |
| Collector - Emitter Voltage | V_{CEO} | 160 | |
| Emitter - Base Voltage | V_{EBO} | 6 | |
| Collector Current - Continuous | I_C | 1 | A |
| Collector Power Dissipation | P_C | 0.5 | W |
| Junction Temperature | T_J | 150 | °C |
| Storage Temperature Range | T_{stg} | -55 to 150 | |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|-------------------------------|------|-----|------|------|
| Collector- base breakdown voltage | V_{CBO} | $I_C= 100 \mu A, I_E= 0$ | 160 | | | V |
| Collector- emitter breakdown voltage | V_{CEO} | $I_C= 10 mA, I_B= 0$ | 160 | | | |
| Emitter - base breakdown voltage | V_{EBO} | $I_E= 100 \mu A, I_C= 0$ | 6 | | | |
| Collector-base cut-off current | I_{CBO} | $V_{CB}= 150 V, I_E= 0$ | | | 1 | uA |
| Emitter cut-off current | I_{EBO} | $V_{EB}= 6V, I_C=0$ | | | 1 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=500 mA, I_B=50mA$ | | | 1 | V |
| Base - emitter saturation voltage | $V_{BE(sat)}$ | $I_C= 500 mA, I_B= 50mA$ | | | 1.2 | |
| Base - emitter voltage | V_{BE} | $V_{CE}= 5V, I_C= 5mA$ | 0.45 | | 0.75 | |
| DC current gain | h_{FE} | $V_{CE}= 6V, I_C= 200mA$ | 100 | | 320 | |
| Collector output capacitance | C_{ob} | $V_{CB}= 10V, I_E= 0, f=1MHz$ | | | 20 | pF |
| Transition frequency | f_T | $V_{CE}= 5V, I_C= 200mA$ | 20 | | | MHz |

RATINGS AND CHARACTERISTIC CURVES

