

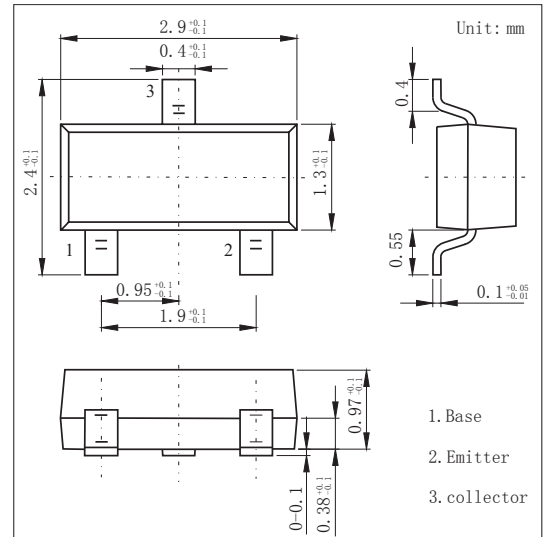
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- Low dynamic output impedance
- The effective temperature compensation in the working range of full temperature
- Low output noise voltage
- Fast on-state response
- PNP Transistors

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 to base voltage | V_{CBO} | -60 | V |
| Collector to emitter voltage | V_{CEO} | -50 | V |
| Emitter to base voltage | V_{EBO} | -5.0 | V |
| Collector Current (DC) | I_C | -150 | mA |
| Power dissipation | P_C | 200 | mW |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-------|-------|-------|---------------|
| Collector-base breakdown voltage | V_{CBO} | $I_C = -50\mu\text{A}, I_E = 0$ | -60 | | | V |
| Collector-emitter breakdown voltage | V_{CEO} | $I_C = -1\text{mA}, I_B = 0$ | -50 | | | V |
| Emitter-base breakdown voltage | V_{EBO} | $I_E = -50\mu\text{A}, I_C = 0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -60\text{V}, I_E = 0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -5\text{V}, I_C = 0$ | | | -0.1 | μA |
| DC current gain | h_{FE} | $V_{CE} = -6\text{V}, I_C = -1\text{mA}$ | 120 | | 475 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -100\text{mA}, I_B = -10\text{mA}$ | | -0.18 | -0.3 | V |
| Base-emitter voltage | $V_{BE(on)}$ | $V_{CE} = -6\text{V}, I_C = -1.0\text{mA}$ | -0.58 | -0.62 | -0.68 | V |
| Collector output capacitance | C_{ob} | $V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$ | | 4.5 | 7 | pF |
| Noise figure | NF | $V_{CE} = -6\text{V}, I_C = -0.3\text{mA}, R_g = 10\text{k}\Omega, f = 100\text{Hz}$ | | 6 | 20 | dB |
| Transition frequency | f_T | $V_{CE} = -6\text{V}, I_C = -10\text{mA}$ | 50 | | | MHz |

RATINGS AND CHARACTERISTIC CURVES

