

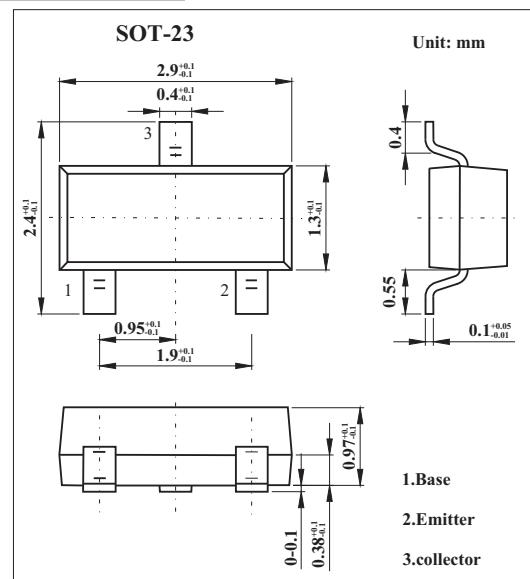
SOT-23 Plastic-Encapsulate Transistors

Features

- Collector Power Dissipation: $P_c=0.3W$
- Collector Current: $I_c=1.5A$
- NPN General Purpose 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-Base Voltage | V_{CBO} | 40 | V |
| Collector-Emitter Voltage | V_{CEO} | 25 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current -Continuous | I_c | 1.5 | A |
| Collector Power Dissipation | P_c | 0.3 | W |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature | T_{stg} | -55 to 150 | °C |

PACKAGE INFORMATION

| Device | Package | Shipping |
|--------|---------|----------------|
| SS8050 | SOT-23 | 3000/Tape&Reel |

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|-----|-----|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = 100 \mu A, I_E = 0$ | 40 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = 1mA, I_B = 0$ | 25 | | | V |
| Emitter-base Breakdown voltage | $V_{(BR)EBO}$ | $I_E = 100 \mu A, I_C = 0$ | 5 | | | V |
| Collector-base cut-off current | I_{CBO} | $V_{CB} = 40 V, I_E = 0$ | | | 0.1 | μA |
| Collector-emitter cut-off current | I_{CEO} | $V_{CE} = 20 V, I_B = 0$ | | | 0.1 | μA |
| Emitter-base cut-off current | I_{EBO} | $V_{EB} = 5 V, I_C = 0$ | | | 0.1 | μA |
| DC current gain | h_{FE} | $V_{CE} = 1 V, I_C = 100 mA$ | 200 | | 350 | |
| | | $V_{CE} = 1 V, I_C = 800 mA$ | 40 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = 800 mA, I_B = 80 mA$ | | | 0.5 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = 800 mA, I_B = 80 mA$ | | | 1.2 | V |
| Transition frequency | f_T | $V_{CE} = 10 V, I_C = 50 mA, f = 30 MHz$ | 100 | | | MHz |

Marking

| | |
|---------|----|
| Marking | Y1 |
|---------|----|