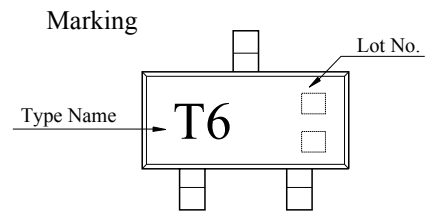
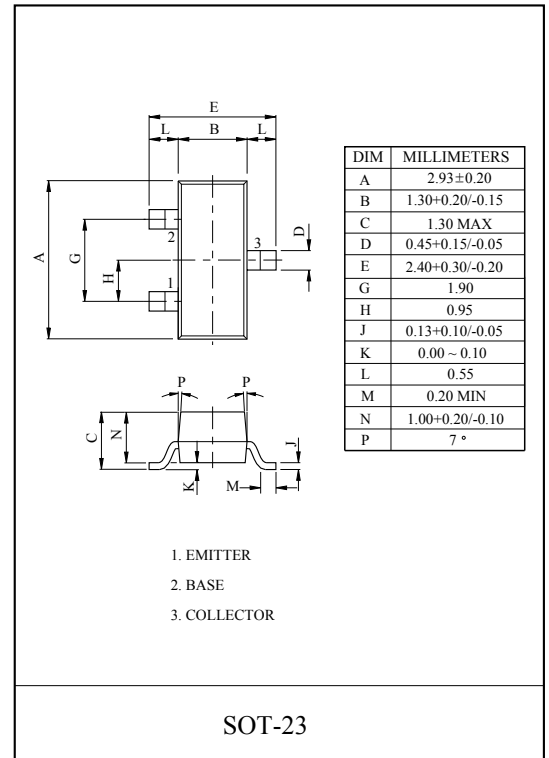


GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|-----------|------|
| Collector-Base Voltage | V_{CB0} | -110 | V |
| Collector-Emitter Voltage | V_{CEO} | -100 | V |
| Emitter-Base Voltage | V_{EBO} | -6 | V |
| Collector Current | I_C | -100 | mA |
| Emitter Current | I_E | 100 | mA |
| Collector Power Dissipation | P_C | 200 | mW |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -65 ~ 150 | °C |



ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|---------------|--|------|------|-------|---------------|
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = -10\text{mA}, I_B = 0$ | -100 | - | - | V |
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C = -10\mu\text{A}, I_E = 0$ | -110 | - | - | V |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E = -10\mu\text{A}, I_C = 0$ | -6 | - | - | V |
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -90\text{V}, I_E = 0$ | - | - | -100 | nA |
| | | $V_{CB} = -90\text{V}, I_E = 0, T_a = 150^\circ\text{C}$ | - | - | -50 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5\text{V}, I_C = 0$ | - | - | -200 | nA |
| DC Current Gain | h_{FE} | $V_{CE} = -1\text{V}, I_C = -10\text{mA}$ | 30 | - | - | |
| | | $V_{CE} = -1\text{V}, I_C = -25\text{mA}$ | 30 | - | - | |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C = -25\text{mA}, I_B = -2.5\text{mA}$ | - | - | -0.9 | V |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -25\text{mA}, I_B = -2.5\text{mA}$ | - | - | -0.25 | V |
| | | $I_C = -75\text{mA}, I_B = -7.5\text{mA}$ | - | - | -0.9 | |
| Transition Frequency | f_T | $I_C = -25\text{mA}, V_{CE} = -5\text{V}, f = 100\text{MHz}$ | 50 | - | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$ | - | 3 | - | pF |