

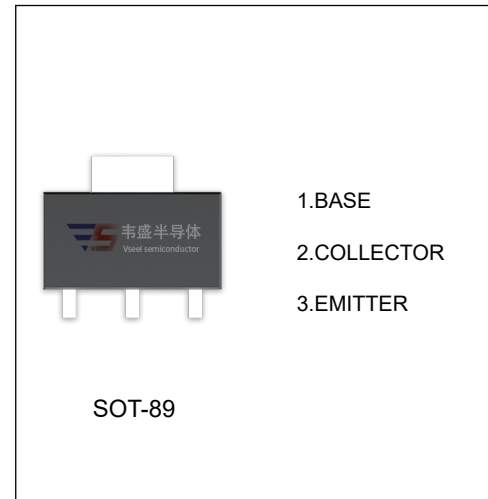
2SB1073 TRANSISTOR (PNP)

FEATURES

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Large peak collector current I_C

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|----------------|--|---------|------------------|
| V_{CBO} | Collector-Base Voltage | -30 | V |
| V_{CEO} | Collector-Emitter Voltage | -20 | V |
| V_{EBO} | Emitter-Base Voltage | -7 | V |
| I_C | Collector Current -Continuous | -4 | A |
| P_C | Collector Power Dissipation | 0.5 | W |
| T_J, T_{stg} | Operation Junction and Storage Temperature Range | -55-150 | $^\circ\text{C}$ |



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|-----|------|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-10\mu\text{A}, I_E=0$ | -30 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-1\text{mA}, I_B=0$ | -20 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=-10\mu\text{A}, I_C=0$ | -7 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-30\text{V}, I_E=0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-7\text{V}, I_C=0$ | | | -0.1 | μA |
| DC current gain | h_{FE} | $V_{CE}=-2\text{V}, I_C=-2\text{A}$ | 120 | | 315 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-3\text{A}, I_B=-100\text{mA}$ | | | -1 | V |
| Transition frequency | f_T | $V_{CE}=-6\text{V}, I_C=-50\text{mA}, f=200\text{MHz}$ | | 120 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=-20\text{V}, I_E=0, f=1\text{MHz}$ | | 40 | | pF |

CLASSIFICATION OF h_{FE}

| Rank | Q | R |
|---------|---------|---------|
| Range | 120-205 | 180-315 |
| Marking | IQ | IR |