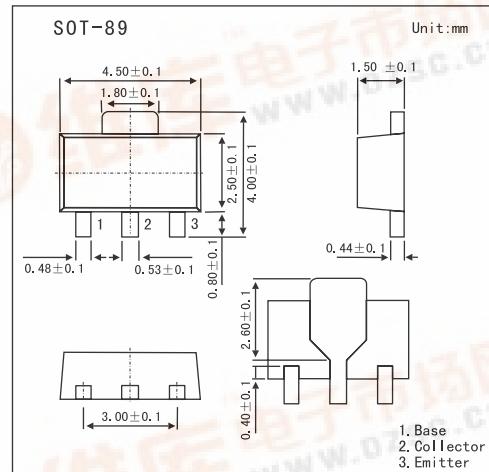


SMD Type

Transistors

PNP Silicon Epitaxial Transistor 2SB805

**■ Features**

- High collector to emitter voltage: $V_{CEO} > -100V$.

■ Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | Unit |
|------------------------------|-------------|-------------|------------|
| Collector-base voltage | V_{CBO} | -100 | V |
| Collector-emitter voltage | V_{CEO} | -100 | V |
| Emitter-base voltage | V_{EBO} | -5 | V |
| Collector current | I_C | -0.7 | A |
| Collector current (pulse) *1 | $I_{C(pu)}$ | -1.2 | A |
| Collector power dissipation | P_c | 2 | W |
| Junction temperature | T_j | 150 | $^\circ C$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ C$ |

*1. PW ≤ 10ms, duty cycle ≤ 50%

■ Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|--|---------------|--|------|------|------|------|
| Collector cutoff current | I_{CBO} | $V_{CB} = -100V$, $I_E = 0$ | | | -100 | nA |
| Emitter cutoff current | I_{EBO} | $V_{EB} = -5V$, $I_C = 0$ | | | -100 | nA |
| DC current gain * | h_{FE} | $V_{CE} = -1V$, $I_C = -100mA$ | 90 | 200 | 400 | |
| | | $V_{CE} = -1V$, $I_C = -5.0mA$ | 45 | 200 | | |
| Collector-emitter saturation voltage * | $V_{CE(sat)}$ | $I_C = -500mA$, $I_B = -50mA$ | | -0.4 | -0.6 | V |
| Base-emitter saturation voltage * | $V_{BE(sat)}$ | $I_C = -500mA$, $I_B = -50mA$ | | -0.9 | -1.5 | V |
| Base-emitter voltage * | V_{BE} | $V_{CE} = -10V$, $I_C = -10mA$ | -550 | -620 | -650 | mV |
| Output capacitance | C_{ob} | $V_{CB} = -10V$, $I_E = 0$, $f = 1.0MHz$ | | 14 | | pF |
| Transition frequency | f_T | $V_{CE} = -10V$, $I_E = 10mA$ | | 75 | | MHz |

* PW ≤ 350μs, duty cycle ≤ 2%

■ hFE Classification

| Marking | KM | KL | KK |
|---------|--------|---------|---------|
| hFE | 90~180 | 135~270 | 200~400 |