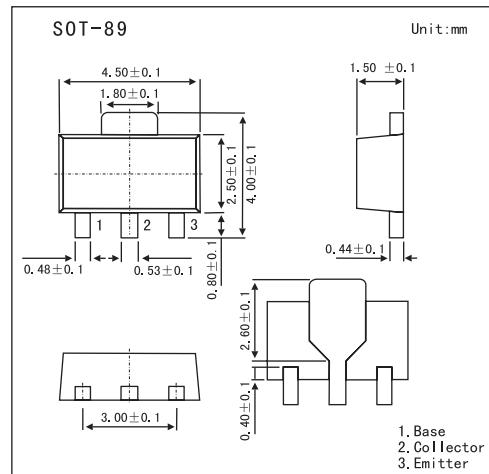


2SD2359

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$.
- Mini Power type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.



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

| Parameter | Symbol | Rating | Unit |
|-----------------------------|-----------|-------------|------------------|
| Collector-base voltage | V_{CBO} | 20 | V |
| Collector-emitter voltage | V_{CEO} | 20 | V |
| Emitter-base voltage | V_{EBO} | 5 | V |
| Collector current | I_C | 1.2 | A |
| Peak collector current | I_{CP} | 1 | A |
| Collector power dissipation | P_C | 1 | W |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|--------------------------------------|---------------|---|-----|------|-----|---------------|
| Collector-base cutoff current | I_{CBO} | $V_{CB} = 14 \text{ V}, I_E = 0$ | | | 1 | μA |
| Collector-base voltage | V_{CBO} | $I_C = 10 \mu\text{A}, I_E = 0$ | 20 | | | V |
| Collector-emitter voltage | V_{CEO} | $I_C = 1 \text{ mA}, I_B = 0$ | 20 | | | V |
| Emitter-base voltage | V_{EBO} | $I_E = 10 \mu\text{A}, I_C = 0$ | 5 | | | V |
| Forward current transfer ratio | h_{FE} | $V_{CE} = 2 \text{ V}, I_C = 100 \text{ mA}$ | 200 | 800 | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = 500 \text{ mA}, I_B = 10 \text{ mA}$ | | 0.11 | 0.2 | V |
| Transition frequency | f_T | $V_{CB} = 6 \text{ V}, I_E = -50 \text{ mA}, f = 200 \text{ MHz}$ | | 100 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB} = 6 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ | | 23 | | pF |

■ Marking

| | |
|---------|----|
| Marking | 1O |
|---------|----|