

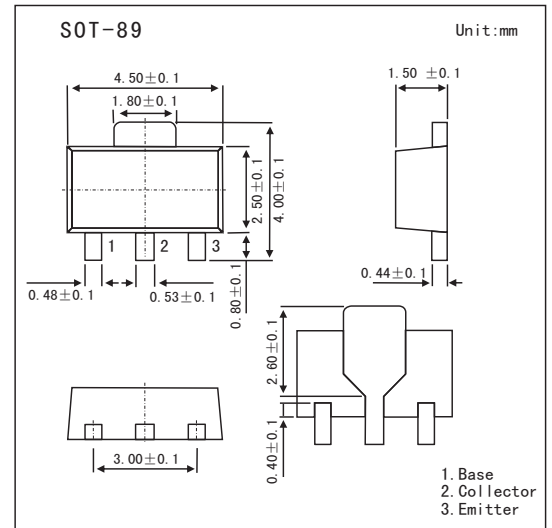
## SOT-89 Plastic-Encapsulate Transistors

### Features

- Collector Power Dissipation:  $P_C=500\text{mW}$
- Collector current:  $I_C=-2\text{A}$
- Complementary to KTC3205
- PNP Silicon Epitaxial Transistor

### MECHANICAL DATA

- Case style:SOT-89molded plastic
- Mounting position:any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter                    | Symbol    | Rating      | Unit |
|------------------------------|-----------|-------------|------|
| Collector to base voltage    | $V_{CB0}$ | -30         | V    |
| Collector to emitter voltage | $V_{CEO}$ | -30         | V    |
| Emitter to base voltage      | $V_{EBO}$ | -5          | V    |
| Collector current (DC)       | $I_C$     | -2          | A    |
| Collector Power Dissipation  | $P_C$     | 500         | mW   |
| Junction temperature         | $T_j$     | 150         | °C   |
| Storage temperature range    | $T_{stg}$ | -55 to +150 | °C   |

### PACKAGE INFORMATION

| Device  | Package | Shipping       |
|---------|---------|----------------|
| KTA1273 | SOT-89  | 1000/Tape&Reel |

| Parameter                           | Symbol        | Test conditions                                    | Min | Typ | Max  | Unit          |
|-------------------------------------|---------------|----------------------------------------------------|-----|-----|------|---------------|
| Collector-base breakdown voltage    | $V_{(BR)CBO}$ | $I_C=-1\text{mA}, I_E=0$                           | -30 |     |      | V             |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-10\text{mA}, I_B=0$                          | -30 |     |      | V             |
| Emitter-base breakdown voltage      | $V_{(BR)EBO}$ | $I_E=-1\text{mA}, I_C=0$                           | -5  |     |      | V             |
| Collector cutoff current            | $I_{CBO}$     | $V_{CB} = -30\text{V}, I_E = 0\text{A}$            |     |     | -0.1 | $\mu\text{A}$ |
| Emitter cutoff current              | $I_{EBO}$     | $V_{EB} = -5\text{V}, I_C = 0\text{A}$             |     |     | -0.1 | $\mu\text{A}$ |
| DC current gain *                   | $h_{FE}$      | $V_{CE} = -2\text{V}, I_C = -500\text{mA}$         | 100 |     | 320  |               |
| Collector saturation voltage        | $V_{CE(sat)}$ | $I_C = -1.5\text{A}, I_B = -30\text{mA}$           |     |     | -2   | V             |
| Base to emitter voltage             | $V_{BE}$      | $V_{CE} = -2\text{V}, I_C = -500\text{mA}$         |     |     | -1   | V             |
| Transition frequency                | $f_T$         | $V_{CE} = -2\text{V}, I_E = 500\text{mA}$          |     | 120 |      | MHz           |
| Output capacitance                  | $C_{ob}$      | $V_{CE} = -10\text{V}, I_E = 0, f = 1.0\text{MHz}$ |     | 48  |      | pF            |

\* Pulsed:  $PW \leq 350\ \mu\text{s}$ , Duty Cycle  $\leq 2\%$

### hFE Classification

| Rank  | O       | Y       |
|-------|---------|---------|
| Range | 100~200 | 160~320 |