

## Silicon PNP Power Transistors

## 2SA627

## DESCRIPTION

- With TO-3 package
- Wide area of safe operation
- Large current capability

## APPLICATIONS

- Power amplifier applications

## PINNING(see Fig.2)

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Base        |
| 2   | Emitter     |
| 3   | Collector   |

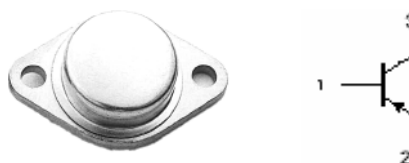


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings( $T_a=25^\circ\text{C}$ )

| SYMBOL    | PARAMETER                   | CONDITIONS             | VALUE   | UNIT             |
|-----------|-----------------------------|------------------------|---------|------------------|
| $V_{CBO}$ | Collector-base voltage      | Open emitter           | -100    | V                |
| $V_{CEO}$ | Collector-emitter voltage   | Open base              | -100    | V                |
| $V_{EBO}$ | Emitter-base voltage        | Open collector         | -5      | V                |
| $I_C$     | Collector current           |                        | -7      | A                |
| $P_C$     | Collector power dissipation | $T_C=25^\circ\text{C}$ | 60      | W                |
| $T_j$     | Junction temperature        |                        | 150     | $^\circ\text{C}$ |
| $T_{stg}$ | Storage temperature         |                        | -55~150 | $^\circ\text{C}$ |

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## CHARACTERISTICS

Tj=25°C unless otherwise specified

| SYMBOL        | PARAMETER                            | CONDITIONS                      | MIN  | TYP. | MAX  | UNIT |
|---------------|--------------------------------------|---------------------------------|------|------|------|------|
| $V_{(BR)CEO}$ | Collector-emitter breakdown voltage  | $I_C = -10mA$ ; $I_B = 0$       | -100 |      |      | V    |
| $V_{(BR)CBO}$ | Collector-base breakdown voltage     | $I_C = -1mA$ ; $I_E = 0$        | -100 |      |      | V    |
| $V_{(BR)EBO}$ | Emitter-base breakdown voltage       | $I_E = -1mA$ ; $I_C = 0$        | -5   |      |      | V    |
| $V_{CE(sat)}$ | Collector-emitter saturation voltage | $I_C = -5A$ ; $I_B = -0.5A$     |      |      | -2.0 | V    |
| $V_{BE(sat)}$ | Base-emitter saturation voltage      | $I_C = -5A$ ; $I_B = -0.5A$     |      |      | -2.5 | V    |
| $I_{CBO}$     | Collector cut-off current            | $V_{CB} = -100V$ ; $I_E = 0$    |      |      | -0.1 | mA   |
| $I_{EBO}$     | Emitter cut-off current              | $V_{EB} = -5V$ ; $I_C = 0$      |      |      | -0.1 | mA   |
| $h_{FE}$      | DC current gain                      | $I_C = -2A$ ; $V_{CE} = -5V$    | 30   |      | 120  |      |
| $f_T$         | Transition frequency                 | $I_C = -0.5A$ ; $V_{CE} = -10V$ |      | 15   |      | MHz  |

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## PACKAGE OUTLINE

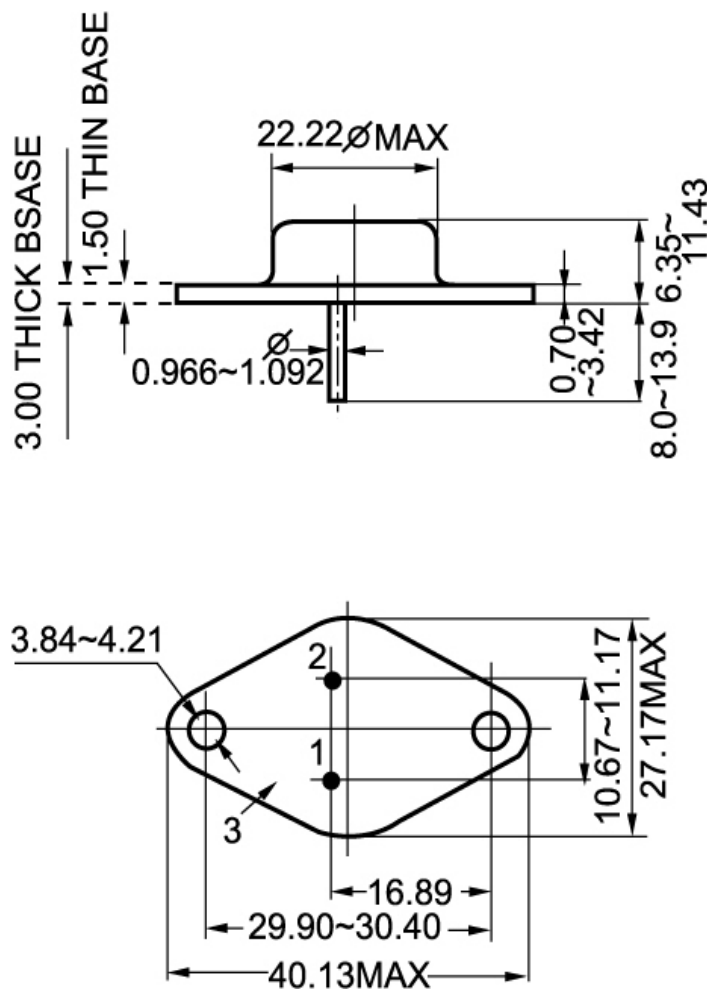


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)