

Silicon PNP Power Transistors

2SA882

DESCRIPTION

- With TO-3 package
- Excellent Safe Operating Area

APPLICATIONS

- For power and switching applications

PINNING

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

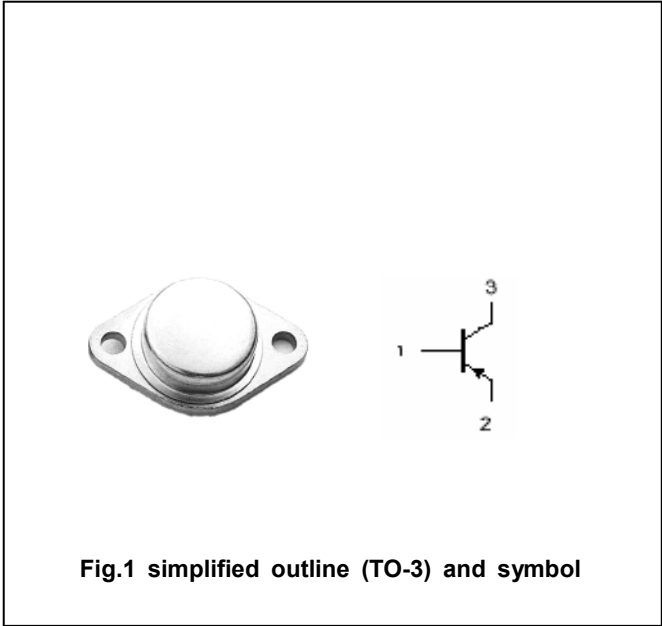


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

| SYMBOL           | PARAMETER                   | CONDITIONS          | VALUE   | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V <sub>CBO</sub> | Collector-base voltage      | Open emitter        | -130    | V    |
| V <sub>CEO</sub> | Collector-emitter voltage   | Open base           | -130    | V    |
| V <sub>EBO</sub> | Emitter-base voltage        | Open collector      | -5      | V    |
| I <sub>C</sub>   | Collector current           |                     | -7      | A    |
| P <sub>C</sub>   | Collector power dissipation | T <sub>C</sub> =25□ | 100     | W    |
| T <sub>j</sub>   | Junction temperature        |                     | 150     | □    |
| T <sub>stg</sub> | Storage temperature         |                     | -65~200 | □    |

THERMAL CHARACTERISTICS

| SYMBOL              | PARAMETER                           | VALUE | UNIT |
|---------------------|-------------------------------------|-------|------|
| R <sub>th j-c</sub> | Thermal resistance junction to case | 1.52  | □/W  |

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## CHARACTERISTICS

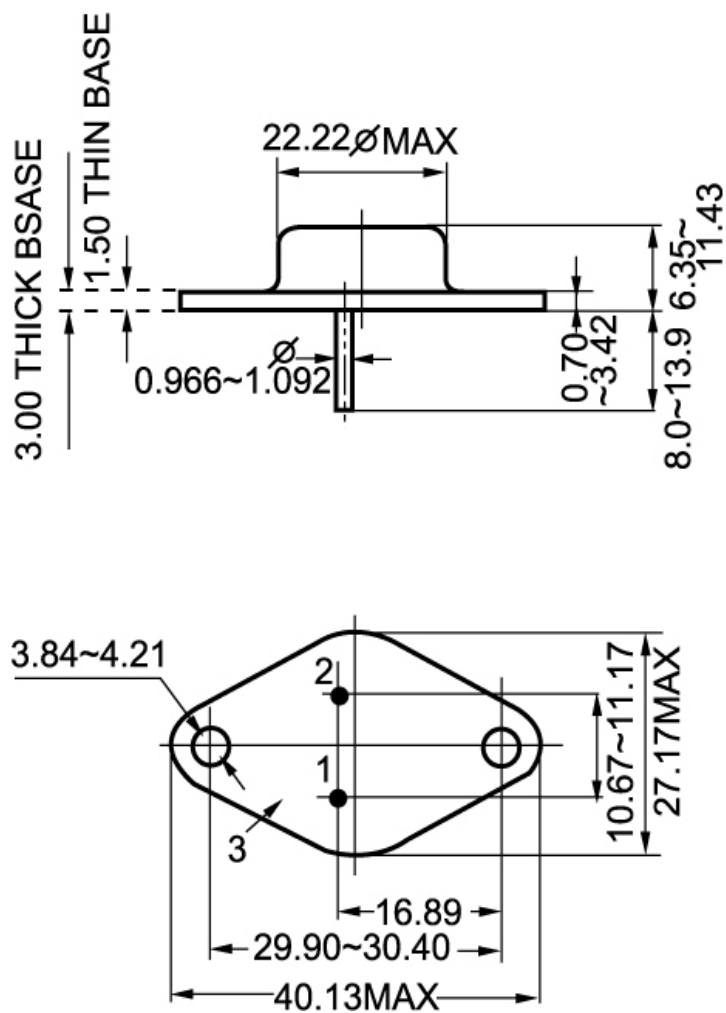
Tj=25°C unless otherwise specified

| SYMBOL        | PARAMETER                            | CONDITIONS             | MIN  | TYP. | MAX  | UNIT |
|---------------|--------------------------------------|------------------------|------|------|------|------|
| $V_{(BR)CEO}$ | Collector-emitter breakdown voltage  | $I_C=-30mA ; I_B=0$    | -130 |      |      | V    |
| $V_{CEsat-1}$ | Collector-emitter saturation voltage | $I_C=-3A ; I_B=-0.3A$  |      |      | -1.0 | V    |
| $V_{CEsat-2}$ | Collector-emitter saturation voltage | $I_C=-7A ; I_B=-1.5A$  |      |      | -3.0 | V    |
| $V_{BE}$      | Base-emitter on voltage              | $I_C=-3A ; V_{CE}=-4V$ |      |      | -1.6 | V    |
| $I_{CBO}$     | Collector cut-off current            | $V_{CE}=-130V ; I_B=0$ |      |      | -0.1 | mA   |
| $I_{EBO}$     | Emitter cut-off current              | $V_{EB}=-5V ; I_C=0$   |      |      | -0.1 | mA   |
| $h_{FE-1}$    | DC current gain                      | $I_C=-1A ; V_{CE}=-4V$ | 40   |      |      |      |
| $h_{FE-2}$    | DC current gain                      | $I_C=-3A ; V_{CE}=-4V$ | 20   |      |      |      |

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## PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.1\text{mm}$ )