

Silicon PNP Power Transistors

2SA1060

DESCRIPTION

- With TO-3PN package
- Complement to type 2SC2484
- High collector power dissipation

APPLICATIONS

- High power audio frequency amplifier

PINNING

| PIN | DESCRIPTION                          |
|-----|--------------------------------------|
| 1   | Base                                 |
| 2   | Collector;connected to mounting base |
| 3   | Emitter                              |

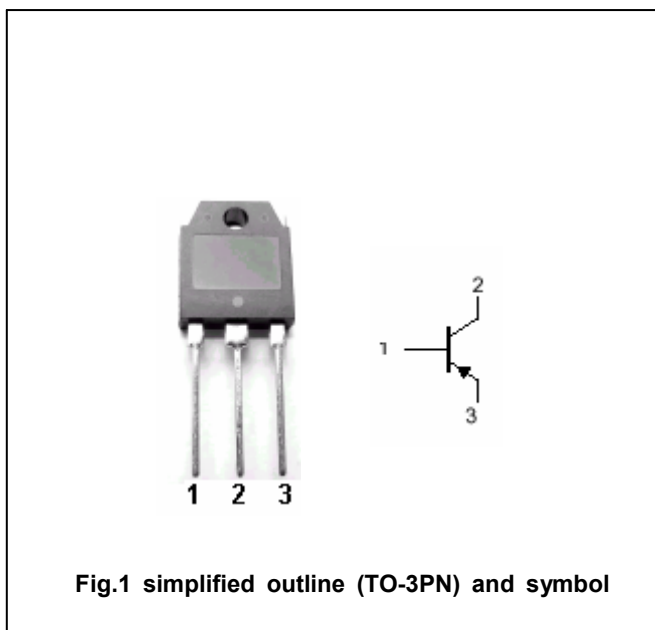


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25°C)

| SYMBOL           | PARAMETER                   | CONDITIONS           | VALUE   | UNIT |
|------------------|-----------------------------|----------------------|---------|------|
| V <sub>CBO</sub> | Collector-base voltage      | Open emitter         | -80     | V    |
| V <sub>CEO</sub> | Collector-emitter voltage   | Open base            | -80     | V    |
| V <sub>EBO</sub> | Emitter-base voltage        | Open collector       | -6      | V    |
| I <sub>C</sub>   | Collector current (DC)      |                      | -5      | A    |
| I <sub>CM</sub>  | Collector current-peak      |                      | -8      | A    |
| P <sub>C</sub>   | Collector power dissipation | T <sub>C</sub> =25°C | 60      | W    |
| T <sub>j</sub>   | Junction temperature        |                      | 150     | °C   |
| T <sub>stg</sub> | Storage temperature         |                      | -55~150 | °C   |

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

| SYMBOL               | PARAMETER                            | CONDITIONS                                   | MIN | TYP. | MAX  | UNIT |
|----------------------|--------------------------------------|--|-----|------|------|------|
| V <sub>(BR)CEO</sub> | Collector-emitter breakdown voltage  | I <sub>C</sub> =-10mA ; I <sub>B</sub> =0    | -80 |      |      | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =-3A ; I <sub>B</sub> =-0.3A  |     |      | -2.0 | V    |
| V <sub>BE</sub>      | Base-emitter on voltage              | I <sub>C</sub> =-3A ; V <sub>CE</sub> =-5V   |     |      | -1.8 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =-80V ; I <sub>E</sub> =0    |     |      | -50  | μA   |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =-3V ; I <sub>C</sub> =0     |     |      | -50  | μA   |
| h <sub>FE-1</sub>    | DC current gain                      | I <sub>C</sub> =-20mA ; V <sub>CE</sub> =-5V | 20  |      |      |      |
| h <sub>FE-2</sub>    | DC current gain                      | I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V   | 40  |      | 200  |      |
| h <sub>FE-3</sub>    | DC current gain                      | I <sub>C</sub> =-3A ; V <sub>CE</sub> =-5V   | 20  |      |      |      |
| f <sub>T</sub>       | Transition frequency                 | I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-5V |     | 20   |      | MHz  |

◆ h<sub>FE-2</sub> Classifications

| R     | Q      | P       |
|-------|--------|---------|
| 40-80 | 60-120 | 100-200 |

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PACKAGE OUTLINE

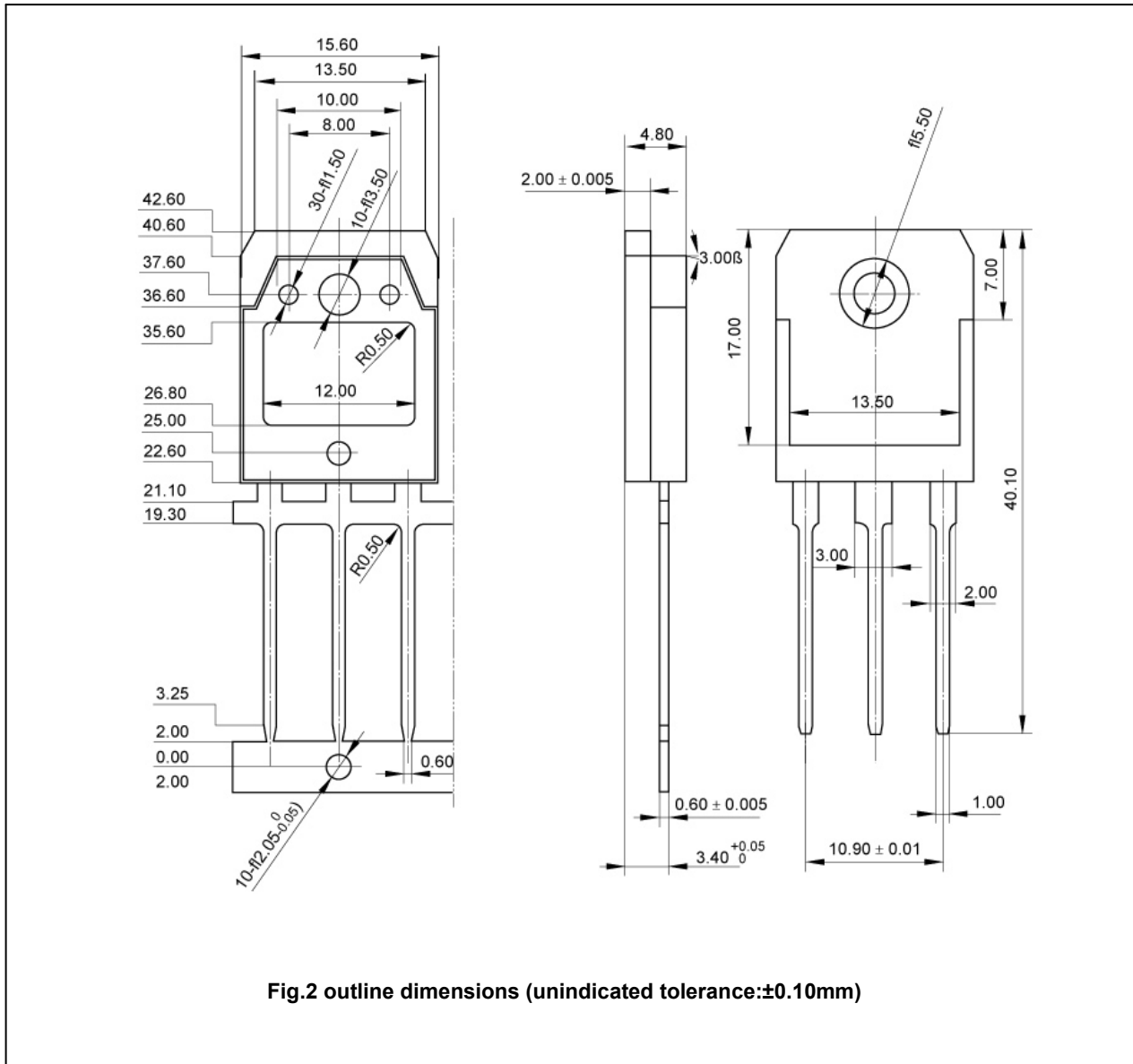


Fig.2 outline dimensions (unindicated tolerance:±0.10mm)