

Silicon PNP Power Transistors

2SB1362

DESCRIPTION

- With TO-3PN package
- Wide area of safe operation
- Complement to type 2SD2053

APPLICATIONS

- For high power amplifier applications

PINNING

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

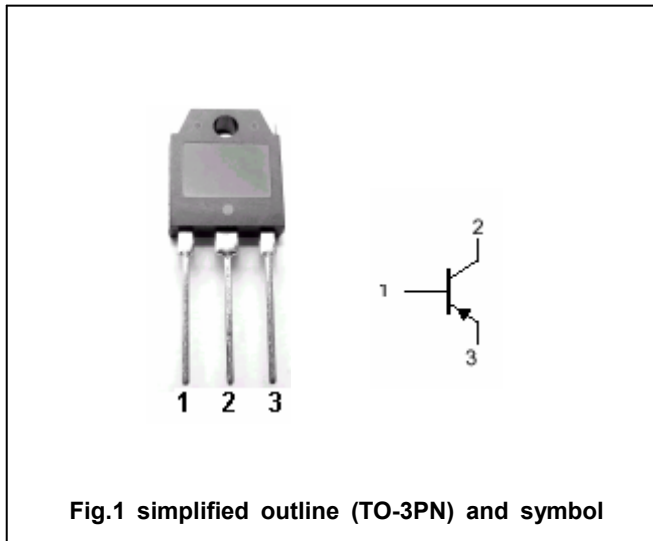


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Tc=25°C)

| SYMBOL           | PARAMETER                   | CONDITIONS           | VALUE   | UNIT |
|------------------|-----------------------------|----------------------|---------|------|
| V <sub>CBO</sub> | Collector-base voltage      | Open emitter         | -150    | V    |
| V <sub>CEO</sub> | Collector-emitter voltage   | Open base            | -150    | V    |
| V <sub>EBO</sub> | Emitter-base voltage        | Open collector       | -5      | V    |
| I <sub>C</sub>   | Collector current (DC)      |                      | -9      | A    |
| I <sub>CM</sub>  | Collector current -peak     |                      | -15     | A    |
| P <sub>C</sub>   | Collector power dissipation | T <sub>C</sub> =25°C | 100     | 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> =-25mA; I <sub>B</sub> =0    | -150 |      |      | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =-7A; I <sub>B</sub> =-0.7A  |      |      | -2.0 | V    |
| V <sub>BE</sub>      | Base-emitter on voltage              | I <sub>C</sub> =-7A; V <sub>CE</sub> =-5V   |      |      | -1.8 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =-150V; I <sub>E</sub> =0   |      |      | -50  | μA   |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =-5V; 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   | 60   |      | 200  |      |
| h <sub>FE-3</sub>    | DC current gain                      | I <sub>C</sub> =-7A; V <sub>CE</sub> =-5V   | 15   |      |      |      |
| f <sub>T</sub>       | Transition frequency                 | I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-5V |      | 15   |      | MHz  |
| C <sub>OB</sub>      | Collector output capacitance         | f=1MHz; V <sub>CB</sub> =-10V               |      | 270  |      | pF   |

◆ h<sub>FE-2</sub> Classifications

| Q      | P       |
|--------|---------|
| 60-120 | 100-200 |

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PACKAGE OUTLINE

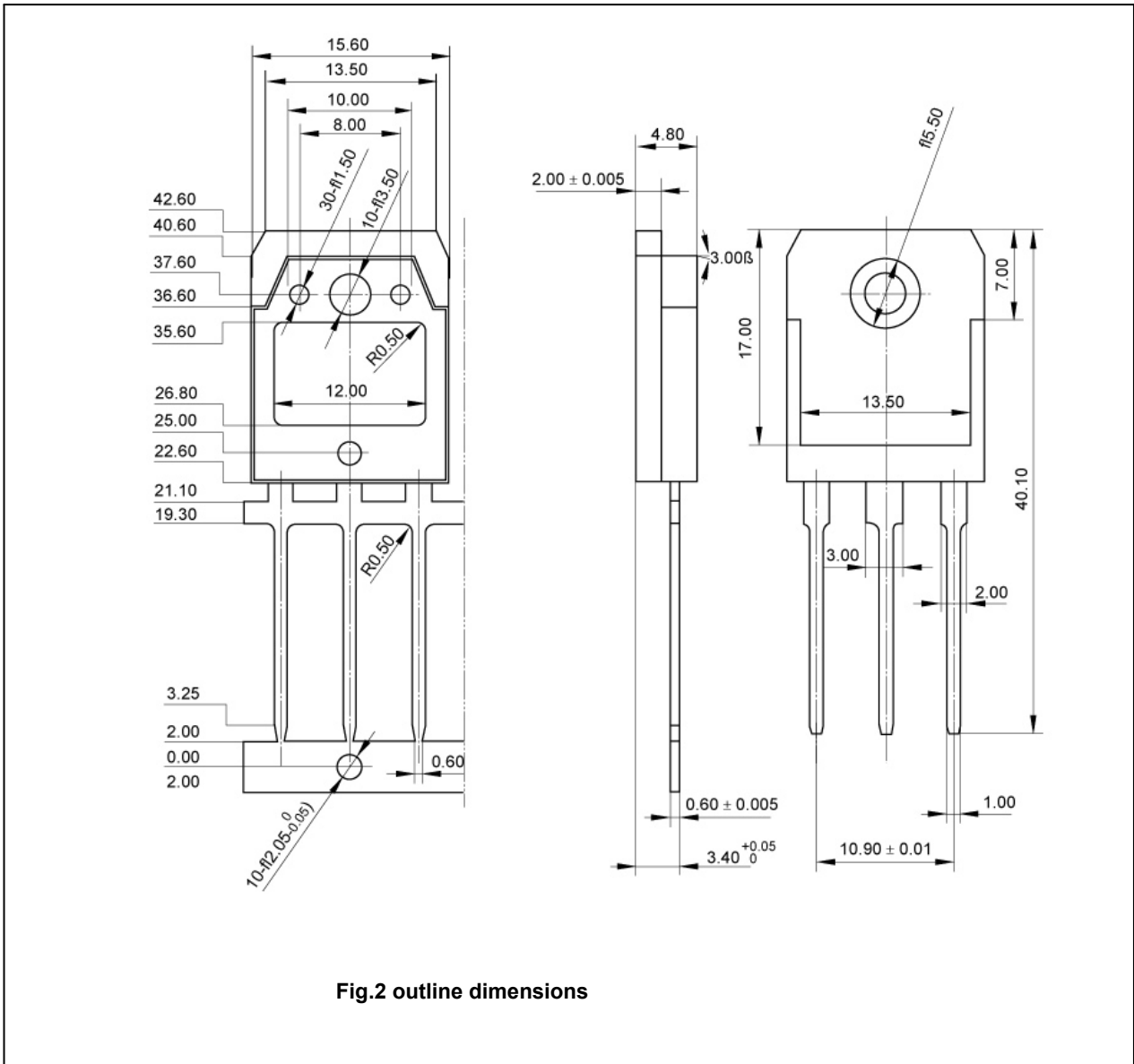


Fig.2 outline dimensions