

Inchange Semiconductor

Product Specification

Silicon PNP Power Transistors

2SB887

DESCRIPTION

- With TO-3PN package
- High DC current gain.
- Large current capacity and wide ASO.
- Low saturation voltage.
- DARLINGTON

APPLICATIONS

- Motor drivers, printer
- Hammer drivers
- Relay drivers,
- Voltage regulator control

PINNING

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

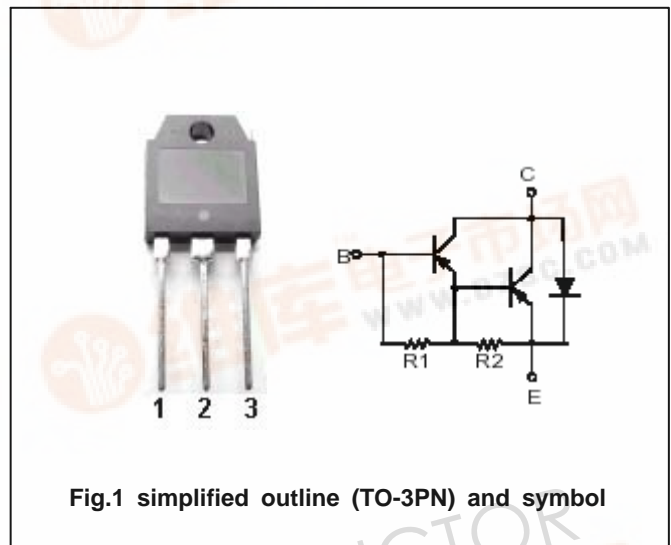


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Tc=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | -110 | V |
| V_{CEO} | Collector-emitter voltage | Open base | -100 | V |
| V_{EBO} | Emitter-base voltage | Open collector | -6 | V |
| I_C | Collector current (DC) | | -10 | A |
| I_{CM} | Collector current-peak | | -15 | A |
| P_C | Collector power dissipation | $T_C=25$ | 70 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -55~150 | |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|------|------|------|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =-50mA ; R _{BE} =∞ | -100 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =-5mA ; I _E =0 | -110 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-5A ; I _B =-10mA | | -1.0 | -1.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =-5A ; I _B =-10mA | | | -2.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-80V ; I _E =0 | | | -0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V ; I _C =0 | | | -3.0 | mA |
| h _{FE} | DC current gain | I _C =-5A ; V _{CE} =-3V | 1500 | 4000 | | |
| f _T | Transition frequency | I _C =-5A ; V _{CE} =-5V | | 20 | | MHz |

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PACKAGE OUTLINE

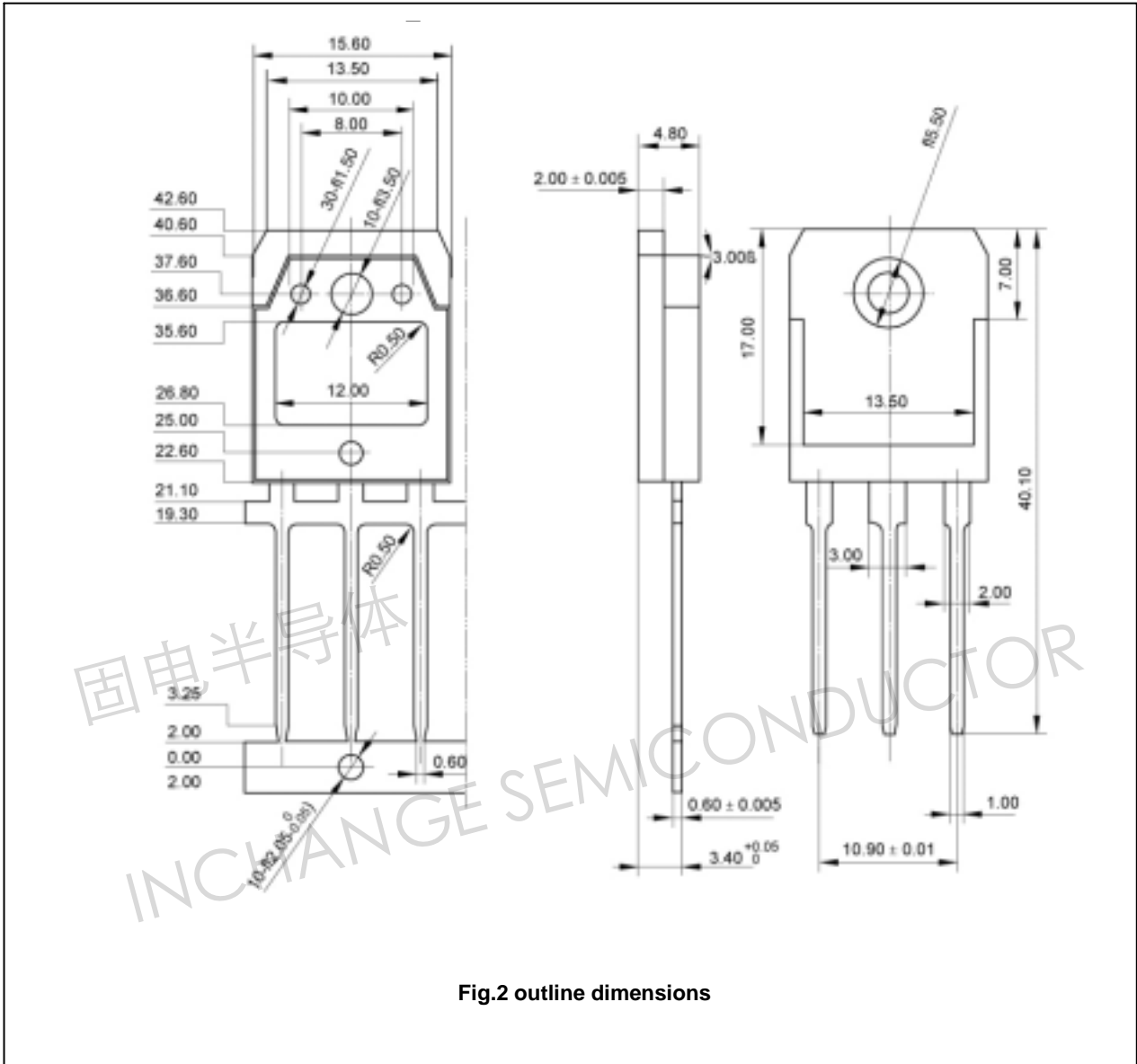


Fig.2 outline dimensions