

Silicon PNP Power Transistors

2SB616

DESCRIPTION

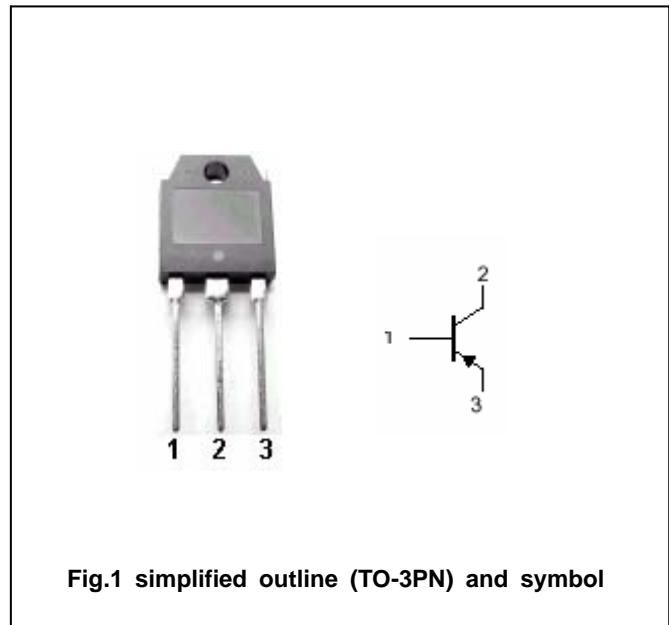
- With TO-3PN package
- Complement to type 2SD586

APPLICATIONS

- For power amplifier applications

PINNING

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

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

| 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 | | -5 | 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

T_j=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 | -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 _{CEsat} | Collector-emitter saturation voltage | I _C =-3A ; I _B =-0.3A | | | -1.5 | V |
| V _{BE} | Base-emitter on voltage | I _C =-1A ; V _{CE} =-5V | | | -1.5 | 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 =-1A ; V _{CE} =-5V | 50 | | | |
| f _T | Transition frequency | I _C =-1A ; V _{CE} =-5V | | 11 | | MHz |
| C _{OB} | Collector output capacitance | I _E =0 ; f=1MHz ; V _{CB} =-10V | | 140 | | pF |

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PACKAGE OUTLINE

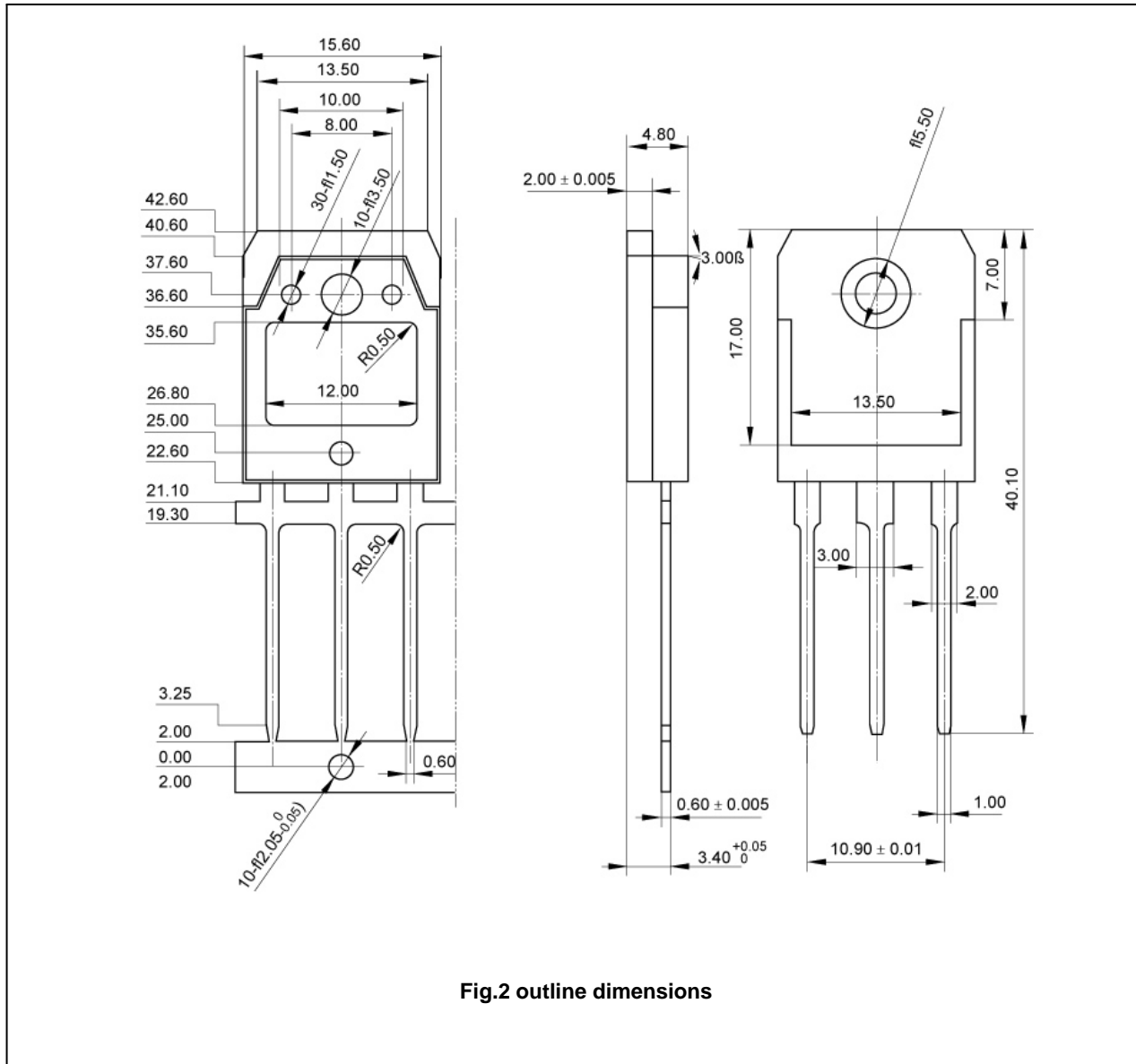


Fig.2 outline dimensions