

Silicon NPN Power Transistors

2SD1451

DESCRIPTION

- With TO-3PN package
- High voltage,high speed
- Built-in damper diode

APPLICATIONS

- For TV horizontal deflection output applications

PINNING

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

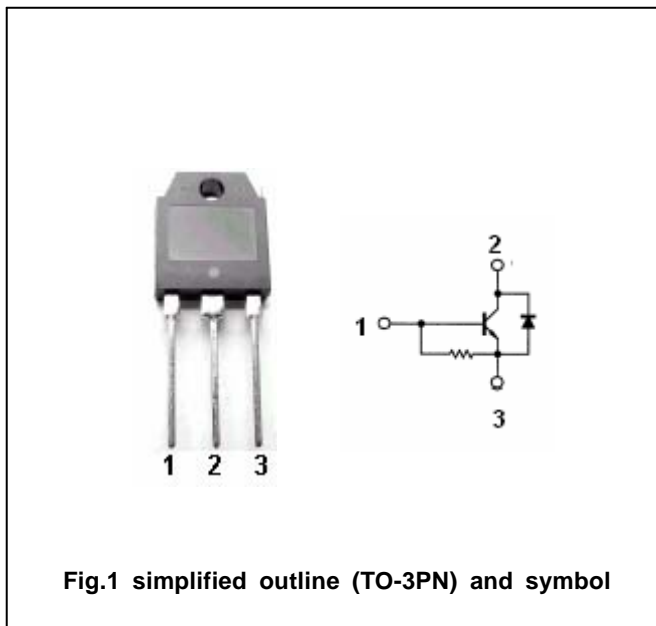


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 1500 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 6 | V |
| I_C | Collector current (DC) | | 1.5 | A |
| P_C | Collector power dissipation | $T_C=25$ | 50 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -45~150 | |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|-----|------|
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =200mA; I _C =0 | 6 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =1.2A; I _B =0.3A | | | 5.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =1.2A; I _B =0.3A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =1500V; I _E =0 | | | 0.5 | mA |
| h _{FE} | DC current gain | I _C =0.3A ; V _{CE} =5V | 6 | | | |
| V _F | Diode forward voltage | I _F =1.5A | | | 2.2 | V |

固电半导体
INCHANGE SEMICONDUCTOR

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PACKAGE OUTLINE

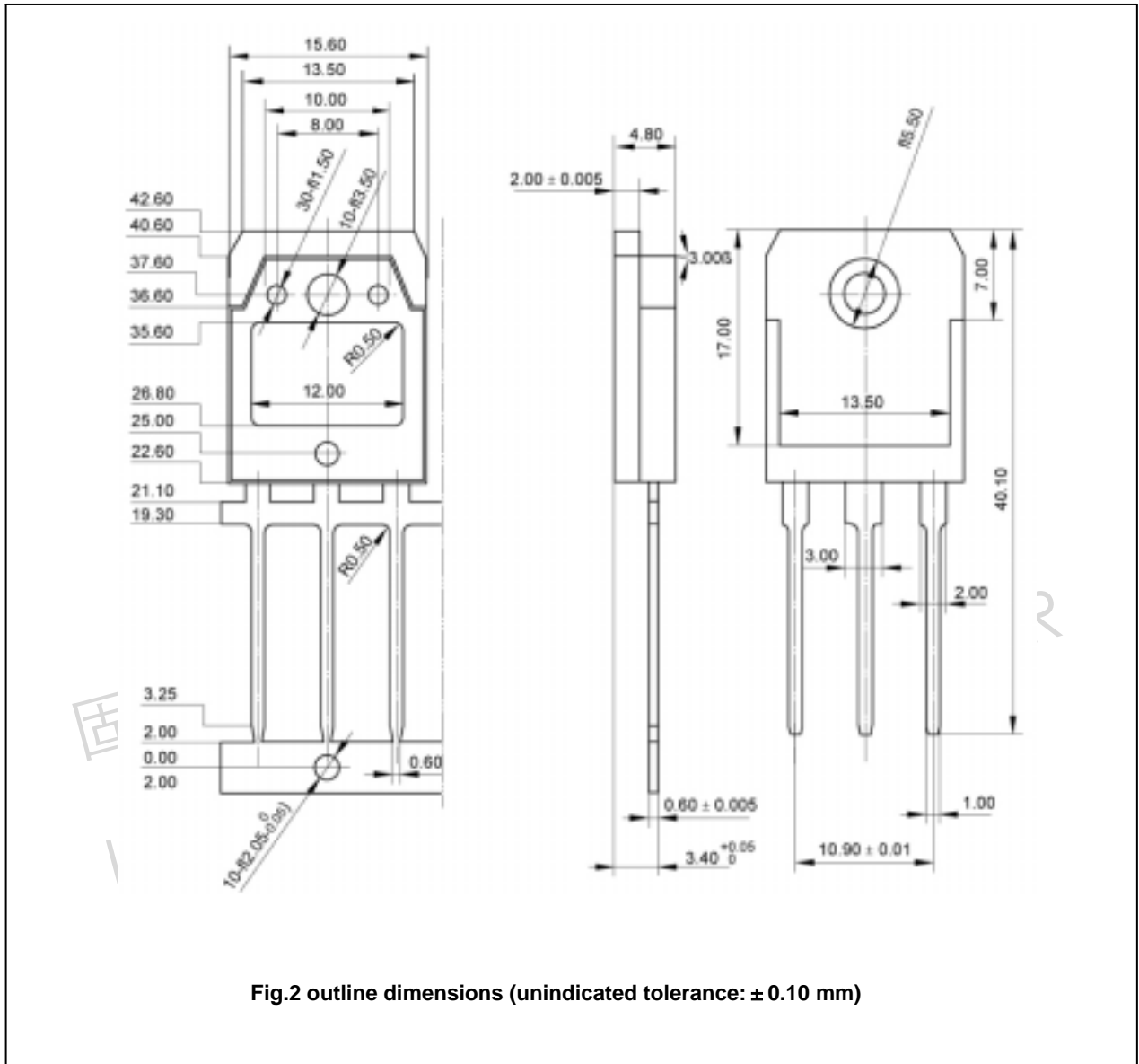


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)