

Silicon NPN Power Transistors

2SC3486

DESCRIPTION

- With TO-3PN package
- High voltage ,high speed
- Wide area of safe operation

APPLICATIONS

- For color TV display horizontal output applications

PINNING

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

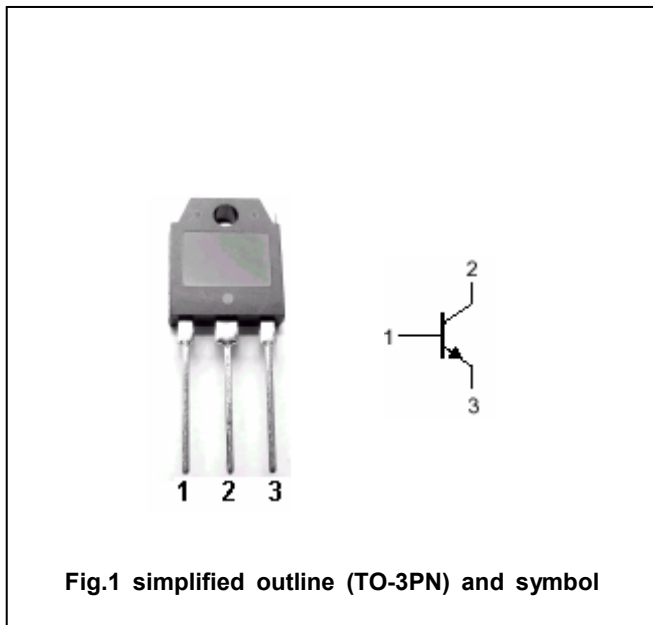


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Ta=□)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 1500 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 800 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I _C | Collector current | | 6 | A |
| I _{CM} | Collector current-peak | | 16 | A |
| P _C | Collector power dissipation | T _C =25□ | 120 | W |
| T _j | Junction temperature | | 150 | □ |
| T _{stg} | Storage temperature | | -55~150 | □ |

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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 =5mA ; R _{BE} =∞ | 800 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =5mA ; I _E =0 | 1500 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =5mA ; I _C =0 | 7 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =5A; I _B =1.2A | | | 5.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =5A; I _B =1.2A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =800V; I _E =0 | | | 10 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 1 | mA |
| h _{FE} | DC current gain | I _C =1A ; V _{CE} =5V | 8 | | | |
| f _T | Transition frequency | I _C =1A ; V _{CE} =10V | | 3 | | MHz |

Switching times

| | | | | | | |
|------------------|--------------|--|--|--|-----|----|
| t _{stg} | Storage time | I _C =5A; R _L =40Ω I _{B1} =1A; I _{B2} =-2A | | | 3.0 | μs |
| t _f | Fall time | | | | 0.3 | μs |

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PACKAGE OUTLINE

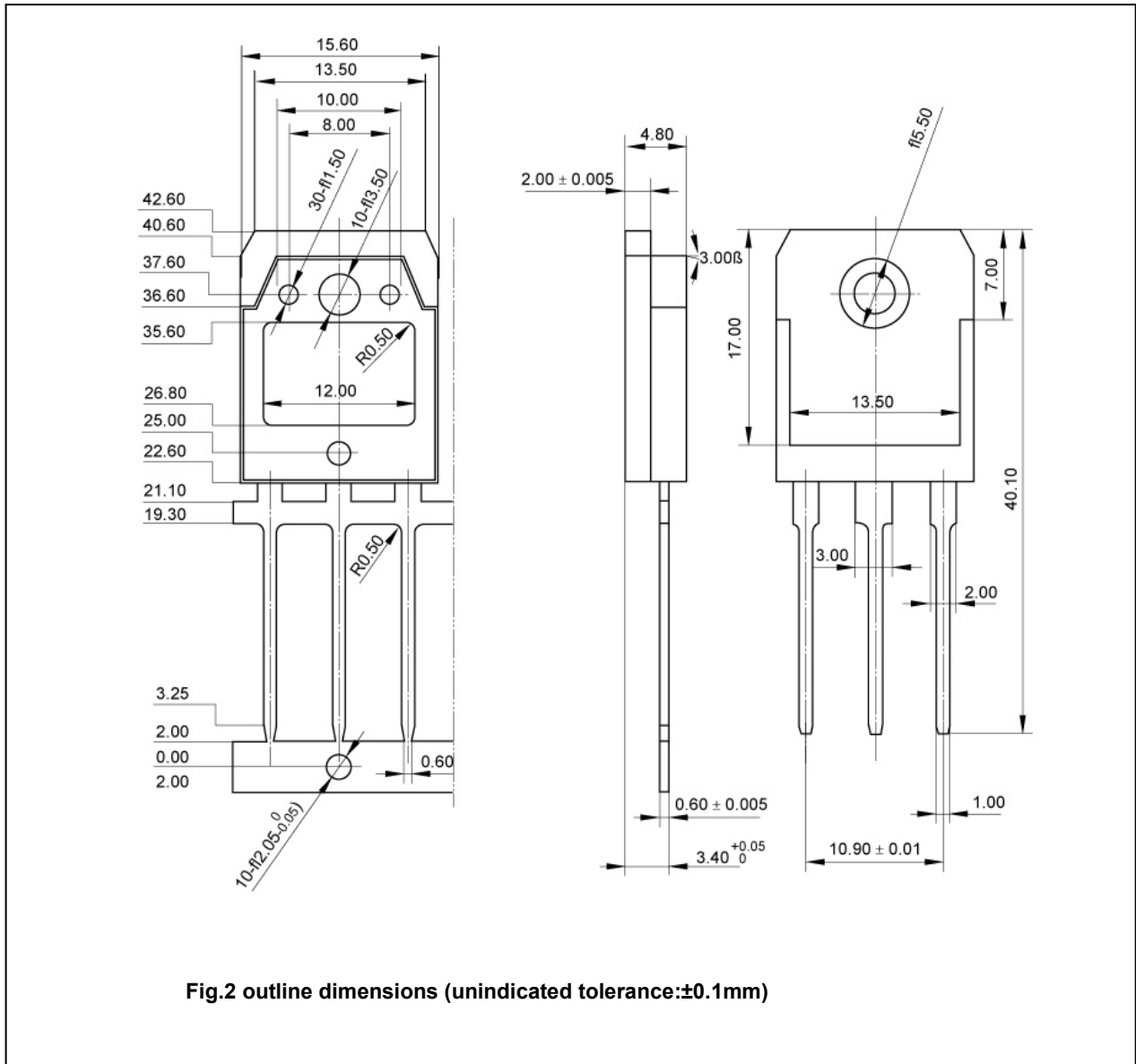


Fig.2 outline dimensions (unindicated tolerance: ± 0.1 mm)