

Silicon NPN Power Transistors

BU903

DESCRIPTION

- With TO-3PN package
- High voltage
- High speed switching

APPLICATIONS

- For color TV horizontal deflection circuits.

PINNING

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

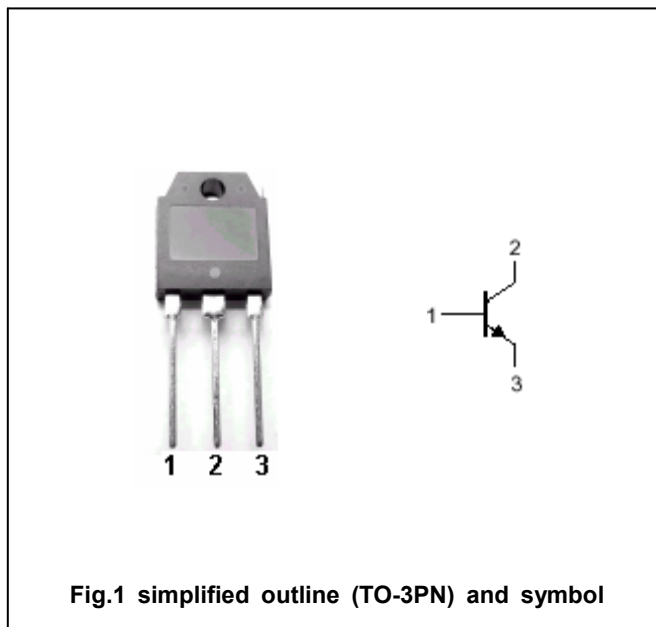


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|---------------------------|----------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 1350 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 550 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I _C | Collector current | | 6 | A |
| P _T | Total power dissipation | T _C =25°C | 125 | W |
| T _j | Junction temperature | | 150 | °C |
| T _{stg} | Storage temperature | | -65~150 | °C |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|----------------------------------|-----|------|
| R _{th j-c} | Thermal resistance junction case | 1.0 | °C/W |

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CHARACTERISTICS

T_j=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|--------------------------------------------|-----|------|-----|------|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =100mA; I _B =0; | 550 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =10mA; I _C =0; | 7 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =3.2A; I _B =0.8A | | | 2.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =3.2A; I _B =0.8A | | | 1.3 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =1300V; I _E =0 | | | 1.0 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 0.1 | mA |
| h _{FE} | DC current gain | I _C =1.5A; V _{CE} =5V | 8 | | | |

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PACKAGE OUTLINE

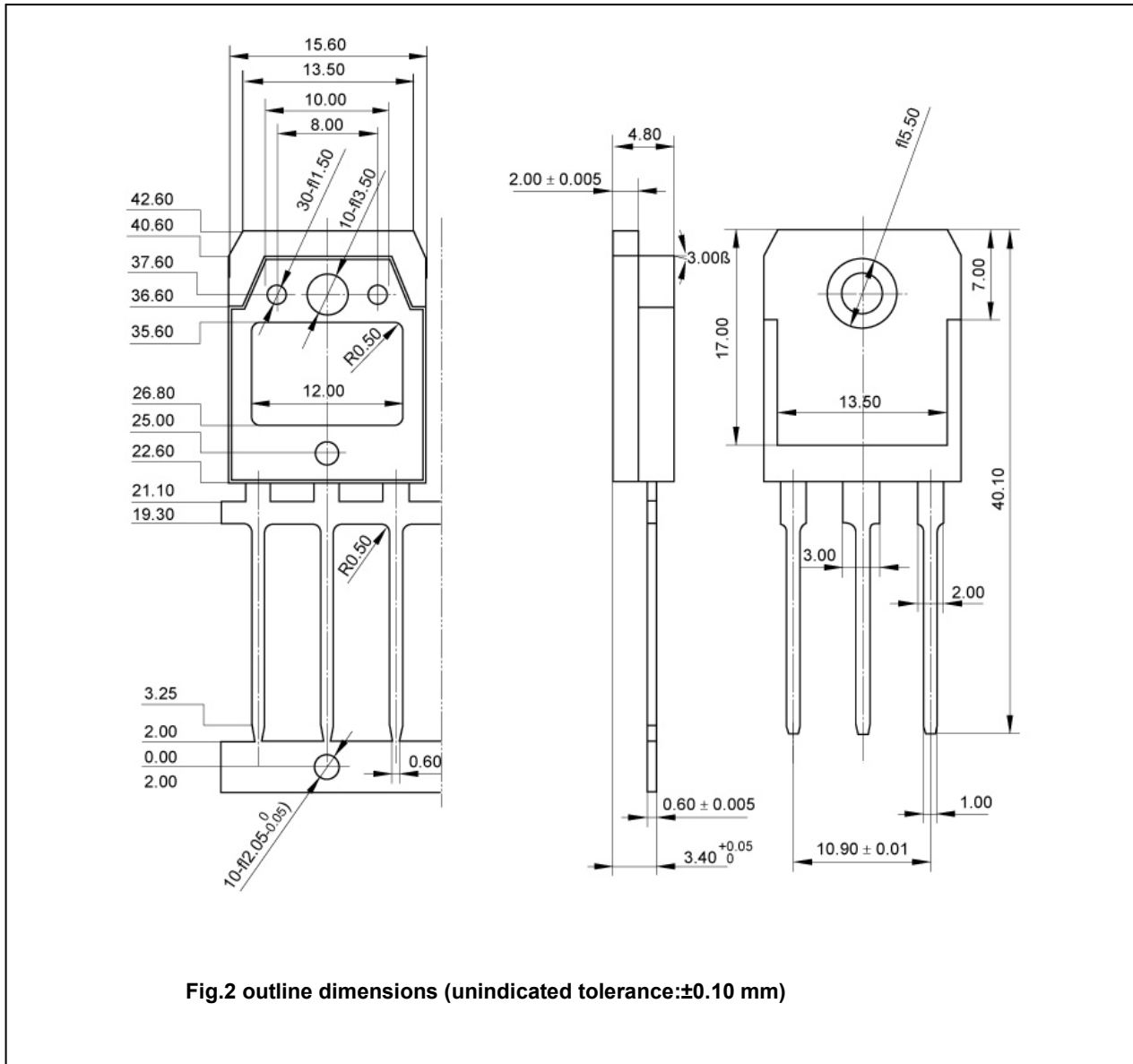


Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)