

Silicon NPN Power Transistors

BU2520DW

DESCRIPTION

- With TO-247 package
- High voltage,high speed
- Built-in damper diode

APPLICATIONS

- For use in horizontal deflection circuits of large screen colour TV receivers

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Base |
| 2 | Collector |
| 3 | Emitter |

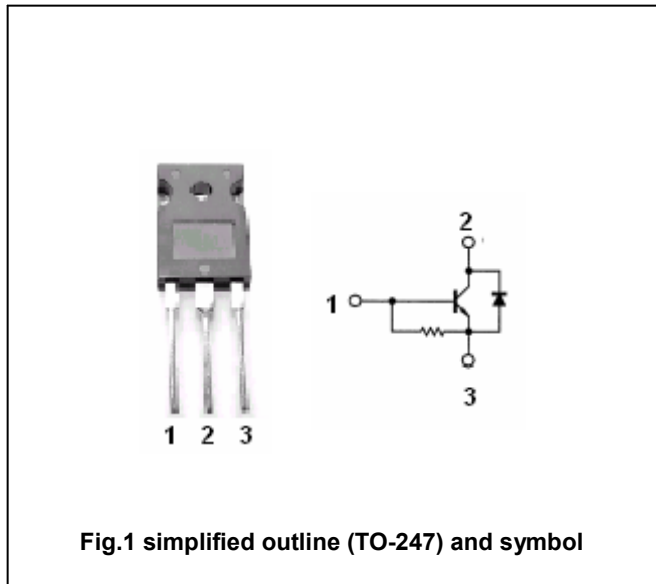


Fig.1 simplified outline (TO-247) and symbol

Absolute maximum ratings(Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|----------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 1500 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 800 | V |
| I _C | Collector current (DC) | | 10 | A |
| I _{CM} | Collector current-peak | | 25 | A |
| I _B | Base Collector current (DC) | | 6 | A |
| I _{BM} | Base current-peak | | 9 | A |
| P _{tot} | Total power dissipation | T _C =25°C | 125 | W |
| T _j | Junction temperature | | 150 | °C |
| T _{stg} | Storage temperature | | -65~150 | °C |

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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, L=25mH | 800 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =600mA ; I _C =0 | 7.5 | 13.5 | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =6A ; I _B =1.2A | | | 5.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =6A ; I _B =1.2A | | | 1.1 | V |
| I _{CES} | Collector cut-off current | V _{CE} =BV _{CES} ; V _{BE} =0 T _C =125°C | | | 1.0 2.0 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =7.5V; I _C =0 | 100 | | 300 | mA |
| h _{FE-1} | DC current gain | I _C =1.0A ; V _{CE} =5V | | 13 | | |
| h _{FE-2} | DC current gain | I _C =6A ; V _{CE} =5V | 5 | 7 | 9.5 | |
| V _F | Diode forward voltage | I _F =6A | | | 2.2 | V |
| C _C | Collector capacitance | f=1MHz; V _{CB} =10V | | 115 | | pF |

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PACKAGE OUTLINE

