

## Silicon NPN Power Transistors

2SD1496

## DESCRIPTION

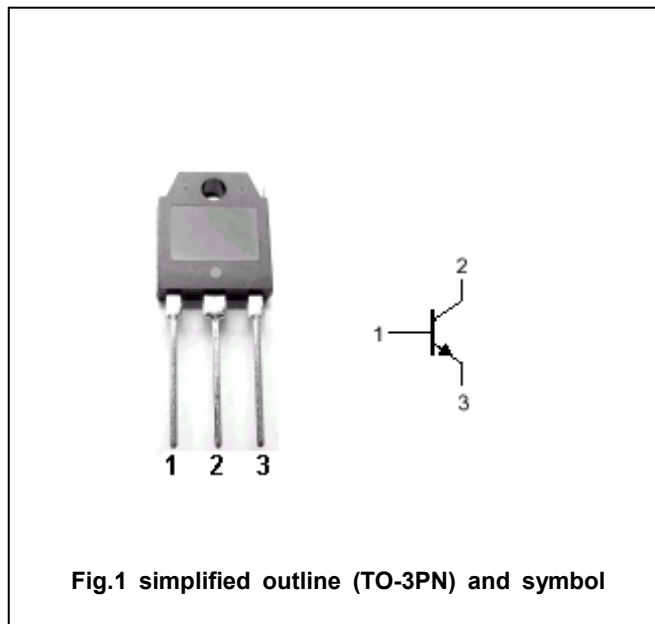
- With TO-3PN package
- High voltage ,high reliability
- Wide area of safe operation

## APPLICATIONS

- High voltage power switching TV horizontal deflection output applications

## PINNING

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



## Absolute maximum ratings (Ta=25℃)

| SYMBOL                | PARAMETER                   | CONDITIONS          | VALUE   | UNIT |
|-----------------------|-----------------------------|---------------------|---------|------|
| V <sub>CBO</sub>      | Collector-base voltage      | Open emitter        | 1500    | V    |
| V <sub>CEO</sub>      | Collector-emitter voltage   | Open base           | 600     | V    |
| V <sub>EBO</sub>      | Emitter-base voltage        | Open collector      | 6       | V    |
| I <sub>C</sub>        | Collector current           |                     | 5       | A    |
| I <sub>C(surge)</sub> | Collector surge current     |                     | 16      | A    |
| P <sub>C</sub>        | Collector power dissipation | T <sub>C</sub> =25℃ | 50      | W    |
| T <sub>j</sub>        | Junction temperature        |                     | 150     | ℃    |
| T <sub>stg</sub>      | Storage temperature         |                     | -45~150 | ℃    |

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## CHARACTERISTICS

T<sub>j</sub>=25 °C unless otherwise specified

| SYMBOL               | PARAMETER                            | CONDITIONS   | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|-----|------|
| V <sub>(BR)EBO</sub> | Emitter-base breakdown voltage       | I <sub>E</sub> =10mA; I <sub>C</sub> =0  | 6   |      |     | V    |
| V <sub>(BR)CEO</sub> | Collector-emitter breakdown voltage  | I <sub>C</sub> =10mA; R <sub>BE</sub> =∞   | 600 |      |     | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =4.5A; I <sub>B</sub> =1.2A   |     |      | 5.0 | V    |
| V <sub>BEsat</sub>   | Base-emitter saturation voltage      | I <sub>C</sub> =4.5A; I <sub>B</sub> =1.2A   |     |      | 1.5 | V    |
| I <sub>CEX</sub>     | Collector cut-off current            | V <sub>CE</sub> =1500V; V <sub>BE</sub> =1.5V  |     |      | 1.0 | mA   |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =6V; I <sub>C</sub> =0   |     |      | 1.0 | mA   |
| h <sub>FE</sub>      | DC current gain                      | I <sub>C</sub> =0.3A; V <sub>CE</sub> =5V  | 10  |      | 30  |      |
| t <sub>f</sub>       | Fall time                            | I <sub>C</sub> =3A; I <sub>B1</sub> =0.7A, I <sub>B2</sub> =-2.7A; L <sub>B</sub> =0 |     |      | 2.3 | μs   |

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PACKAGE OUTLINE

