

## Silicon NPN Power Transistors

2SD2335

## DESCRIPTION

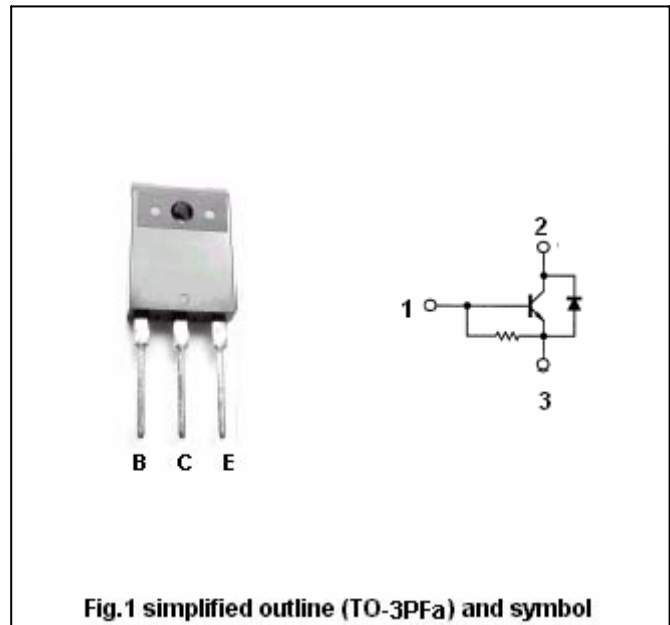
- With TO-3PFa package
- High voltage;high speed
- Built-in damper diode

## APPLICATIONS

- For color TV horizontal output applications

## PINNING

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

Absolute maximum ratings( $T_a=25^{\circ}\text{C}$ )

| SYMBOL    | PARAMETER                   | CONDITIONS               | VALUE   | UNIT               |
|-----------|-----------------------------|--------------------------|---------|--------------------|
| $V_{CBO}$ | Collector-base voltage      | Open emitter             | 1500    | V                  |
| $V_{CEO}$ | Collector-emitter voltage   | Open base                | 600     | V                  |
| $V_{EBO}$ | Emitter-base voltage        |                          | 5       | V                  |
| $I_C$     | Collector current           |                          | 7       | A                  |
| $I_B$     | Base current                |                          | 1.5     | A                  |
| $P_C$     | Collector power dissipation | $T_C=25^{\circ}\text{C}$ | 100     | W                  |
| $T_j$     | Junction temperature        |                          | 150     | $^{\circ}\text{C}$ |
| $T_{stg}$ | Storage temperature         |                          | -55~150 | $^{\circ}\text{C}$ |

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## CHARACTERISTICS

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

| SYMBOL                | PARAMETER                            | CONDITIONS                                | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|---|-----|------|-----|------|
| V <sub>CEO(SUS)</sub> | Collector-emitter sustaining voltage | I <sub>C</sub> =100mA , I <sub>B</sub> =0 | 600 |      |     | V    |
| V <sub>(BR)EBO</sub>  | Emitter-base breakdown voltage       | I <sub>E</sub> =200mA , I <sub>C</sub> =0 | 5   |      |     | V    |
| V <sub>CEsat</sub>    | Collector-emitter saturation voltage | I <sub>C</sub> =6A; I <sub>B</sub> =1.2A  |     |      | 5.0 | V    |
| V <sub>BEsat</sub>    | Base-emitter saturation voltage      | I <sub>C</sub> =6A; I <sub>B</sub> =1.2A  |     |      | 1.5 | V    |
| I <sub>CB0</sub>      | Collector cut-off current            | V <sub>CB</sub> =800V I <sub>E</sub> =0   |     |      | 10  | μ A  |
| h <sub>FE</sub>       | DC current gain                      | I <sub>C</sub> =1A ; V <sub>CE</sub> =5V  | 8   |      |     |      |
| V <sub>F</sub>        | Diode forward voltage                | I <sub>F</sub> =6A                        |     |      | 2.0 | V    |

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PACKAGE OUTLINE



Fig.2 Outline dimensions (unindicated tolerance:  $\pm 0.30\text{mm}$ )