

**Silicon PNP Power Transistors****BD132****DESCRIPTION**

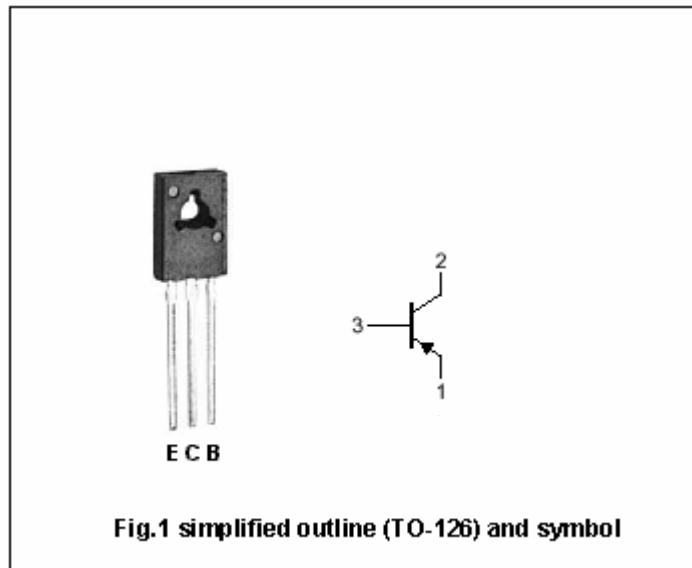
- Complement to type BD131
- With TO-126 package
- High current (Max:- 3A)
- Low voltage (Max: -45V)

**APPLICATIONS**

- For general purpose power applications

**PINNING**

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

**Absolute maximum ratings (Ta=25°C)**

| SYMBOL           | PARAMETER                 | CONDITIONS            | VALUE   | UNIT |
|------------------|---------------------------|-----------------------|---------|------|
| V <sub>CBO</sub> | Collector-base voltage    | Open emitter          | -45     | V    |
| V <sub>CEO</sub> | Collector-emitter voltage | Open base             | -45     | V    |
| V <sub>EBO</sub> | Emitter -base voltage     | Open collector        | -4      | V    |
| I <sub>C</sub>   | Collector current (DC)    |                       | -3      | A    |
| I <sub>CM</sub>  | Collector current-Peak    |                       | -6      | A    |
| I <sub>BM</sub>  | Base current-Peak         |                       | -0.5    | A    |
| P <sub>t</sub>   | Total power dissipation   | T <sub>mb</sub> ≤60°C | 15      | W    |
| T <sub>j</sub>   | Junction temperature      |                       | 150     | °C   |
| T <sub>stg</sub> | Storage temperature       |                       | -65~150 | °C   |

**THERMAL CHARACTERISTICS**

| SYMBOL               | PARAMETER   | VALUE | UNIT |
|----------------------|---|-------|------|
| R <sub>th j-a</sub>  | Thermal resistance from junction to ambient       | 100   | K/W  |
| R <sub>th j-mb</sub> | Thermal resistance from junction to mounting base | 6     | K/W  |

**Silicon PNP Power Transistors****BD132****CHARACTERISTICS****T<sub>j</sub>=25°C unless otherwise specified**

| SYMBOL               | PARAMETER                            | CONDITIONS   | MIN | TYP. | MAX  | UNIT |
|----------------------|--------------------------------------|--|-----|------|------|------|
| V <sub>CEsat-1</sub> | Collector-emitter saturation voltage | I <sub>C</sub> =-0.5A; I <sub>B</sub> =-50mA                   |     |      | -0.3 | V    |
| V <sub>CEsat-2</sub> | Collector-emitter saturation voltage | I <sub>C</sub> =-2A; I <sub>B</sub> =-0.2A                     |     |      | -0.7 | V    |
| V <sub>BEsat-1</sub> | Base-emitter saturation voltage      | I <sub>C</sub> =-0.5A; I <sub>B</sub> =-50mA                   |     |      | -1.2 | V    |
| V <sub>BEsat-2</sub> | Base-emitter saturation voltage      | I <sub>C</sub> =-2A; I <sub>B</sub> =-0.2A                     |     |      | -1.5 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =-50V; I <sub>E</sub> =0                       |     |      | -50  | nA   |
|                      |                                      | V <sub>CB</sub> =-50V; I <sub>E</sub> =0 T <sub>j</sub> =150°C |     |      | -10  | μA   |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =-5V; I <sub>C</sub> =0                        |     |      | -50  | nA   |
| h <sub>FE-1</sub>    | DC current gain                      | I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-12V                  | 40  |      |      |      |
| h <sub>FE-2</sub>    | DC current gain                      | I <sub>C</sub> =-2A ; V <sub>CE</sub> =-1V                     | 20  |      |      |      |
| f <sub>T</sub>       | Transition frequency                 | I <sub>C</sub> =-0.25A; V <sub>CE</sub> =-5V ,f=100MHz         | 60  |      |      | MHz  |

**Silicon PNP Power Transistors****BD132****PACKAGE OUTLINE**