

Silicon PNP Power Transistors

BD132

DESCRIPTION

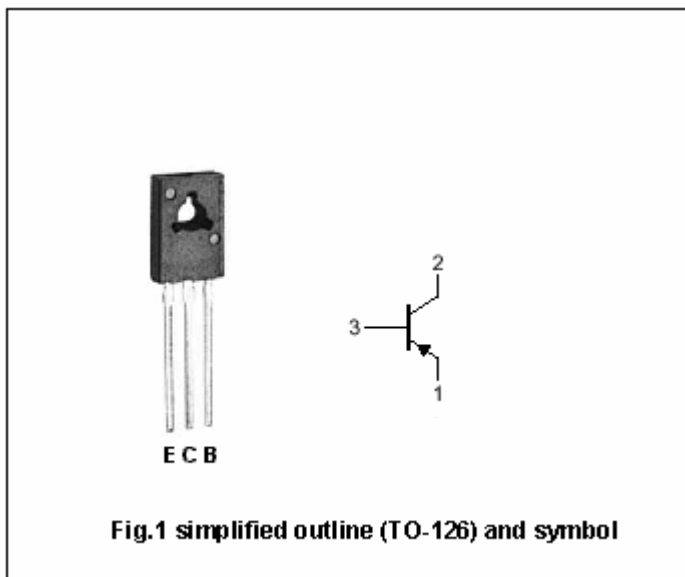
- Complement to type BD131
- With TO-126 package
- High current (Max:- 3A)
- Low voltage (Max: -45V)

APPLICATIONS

- For general purpose power applications

PINNING

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



Absolute maximum ratings (Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|---------------------------|--------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | -45 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -45 | V |
| V _{EBO} | Emitter -base voltage | Open collector | -4 | V |
| I _C | Collector current (DC) | | -3 | A |
| I _{CM} | Collector current-Peak | | -6 | A |
| I _{BM} | Base current-Peak | | -0.5 | A |
| P _t | Total power dissipation | T _{mb} 60 | 15 | W |
| T _j | Junction temperature | | 150 | |
| T _{stg} | Storage temperature | | -65~150 | |

THERMAL CHARACTERISTICS

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

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CHARACTERISTICS

 $T_j=25$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|------------------------------------|-----|------|------|---------|
| $V_{CEsat-1}$ | Collector-emitter saturation voltage | $I_C=-0.5A; I_B=-50mA$ | | | -0.3 | V |
| $V_{CEsat-2}$ | Collector-emitter saturation voltage | $I_C=-2A; I_B=-0.2A$ | | | -0.7 | V |
| $V_{BEsat-1}$ | Base-emitter saturation voltage | $I_C=-0.5A; I_B=-50mA$ | | | -1.2 | V |
| $V_{BEsat-2}$ | Base-emitter saturation voltage | $I_C=-2A; I_B=-0.2A$ | | | -1.5 | V |
| I_{CBO} | Collector cut-off current | $V_{CB}=-50V; I_E=0$ | | | -50 | nA |
| | | $V_{CB}=-50V; I_E=0; T_j=150$ | | | -10 | μA |
| I_{EBO} | Emitter cut-off current | $V_{EB}=-5V; I_C=0$ | | | -50 | nA |
| h_{FE-1} | DC current gain | $I_C=-0.5A; V_{CE}=-12V$ | 40 | | | |
| h_{FE-2} | DC current gain | $I_C=-2A; V_{CE}=-1V$ | 20 | | | |
| f_T | Transition frequency | $I_C=-0.25A; V_{CE}=-5V; f=100MHz$ | 60 | | | MHz |

PACKAGE OUTLINE

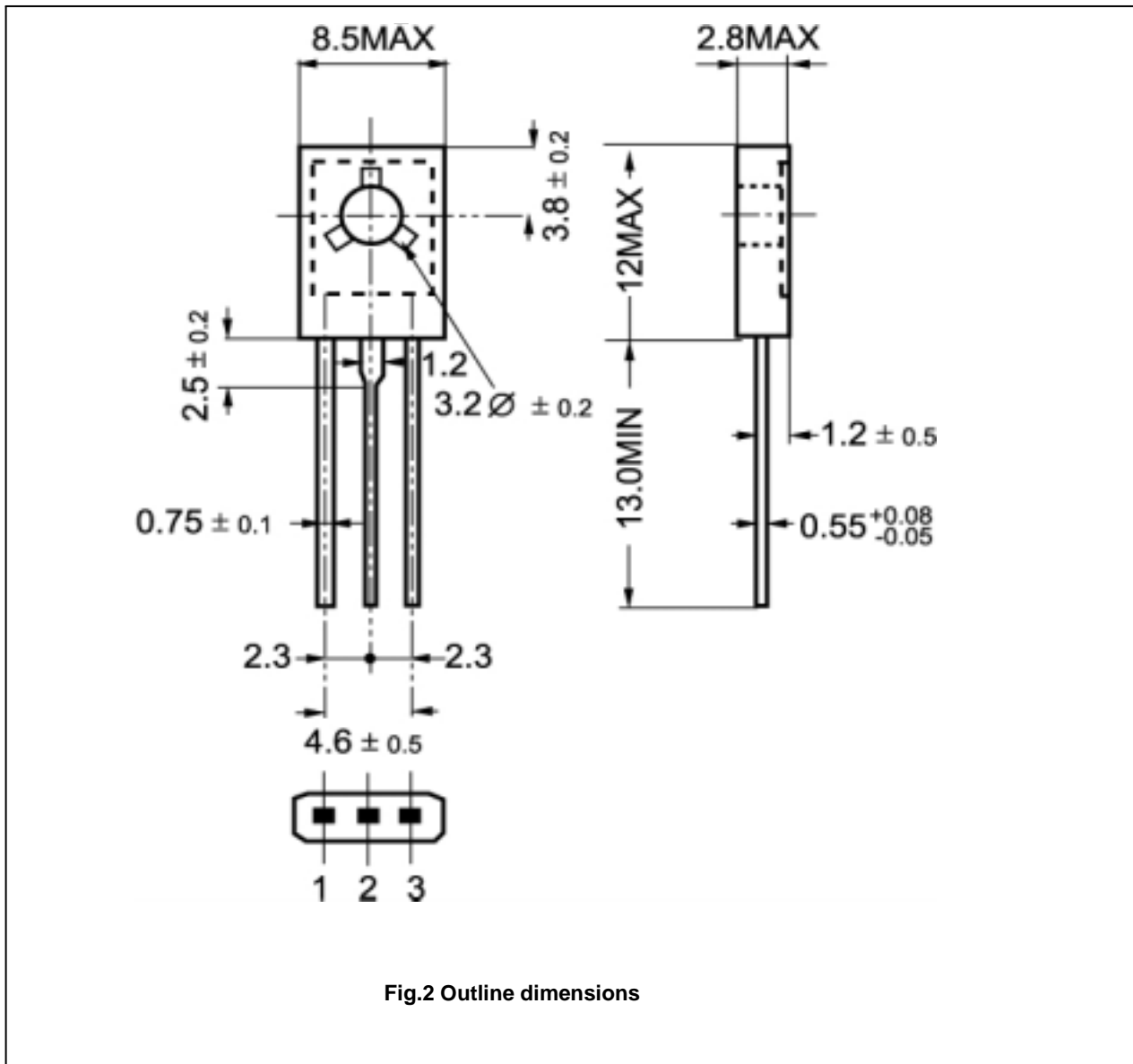


Fig.2 Outline dimensions