

## Silicon PNP Power Transistors

2SB548

## DESCRIPTION

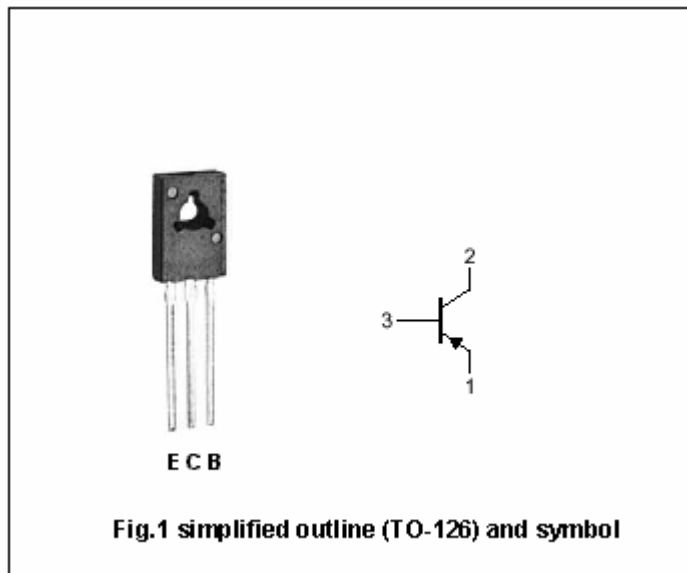
- With TO-126 package
- Complement to type 2SD414

## APPLICATIONS

- Designed for use in driver and output stages of audio frequency amplifiers

## PINNING

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

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

| SYMBOL    | PARAMETER                 | CONDITIONS             | VALUE   | UNIT             |
|-----------|---------------------------|------------------------|---------|------------------|
| $V_{CBO}$ | Collector-base voltage    | Open emitter           | -100    | V                |
| $V_{CEO}$ | Collector-emitter voltage | Open base              | -80     | V                |
| $V_{EBO}$ | Emitter-base voltage      | Open collector         | -5      | V                |
| $I_C$     | Collector current (DC)    |                        | -0.8    | A                |
| $P_D$     | Total power dissipation   | $T_a=25^\circ\text{C}$ | 1.0     | W                |
|           |                           | $T_C=25^\circ\text{C}$ | 10      |                  |
| $T_j$     | Junction temperature      |                        | 150     | $^\circ\text{C}$ |
| $T_{stg}$ | Storage temperature       |                        | -55~150 | $^\circ\text{C}$ |

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## CHARACTERISTICS

Tj=25°C unless otherwise specified

| SYMBOL        | PARAMETER                            | CONDITIONS                           | MIN | TYP. | MAX  | UNIT    |
|---------------|--------------------------------------|--------------------------------------|-----|------|------|---------|
| $V_{(BR)CEO}$ | Collector-emitter breakdown voltage  | $I_C = -10mA ; I_B = 0$              | -80 |      |      | V       |
| $V_{(BR)EBO}$ | Emitter-base breakdown voltage       | $I_E = -50\mu A ; I_C = 0$           | -5  |      |      | V       |
| $V_{CEsat}$   | Collector-emitter saturation voltage | $I_C = -0.5A ; I_B = -50mA$          |     |      | -2.0 | V       |
| $V_{BEsat}$   | Base-emitter saturation voltage      | $I_C = -0.5A ; I_B = -50mA$          |     |      | -1.5 | V       |
| $I_{CBO}$     | Collector cut-off current            | $V_{CB} = -80V ; I_E = 0$            |     |      | -1.0 | $\mu A$ |
| $I_{EBO}$     | Emitter cut-off current              | $V_{EB} = -5V ; I_C = 0$             |     |      | -1.0 | $\mu A$ |
| $h_{FE}$      | DC current gain                      | $I_C = -0.2A ; V_{CE} = -5V$         | 40  |      | 320  |         |
| $C_{OB}$      | Output capacitance                   | $I_E = 0 ; V_{CB} = -10V ; f = 1MHz$ |     | 25   |      | pF      |
| $f_T$         | Transition frequency                 | $I_C = -0.1A ; V_{CE} = -5V$         |     | 70   |      | MHz     |

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## PACKAGE OUTLINE

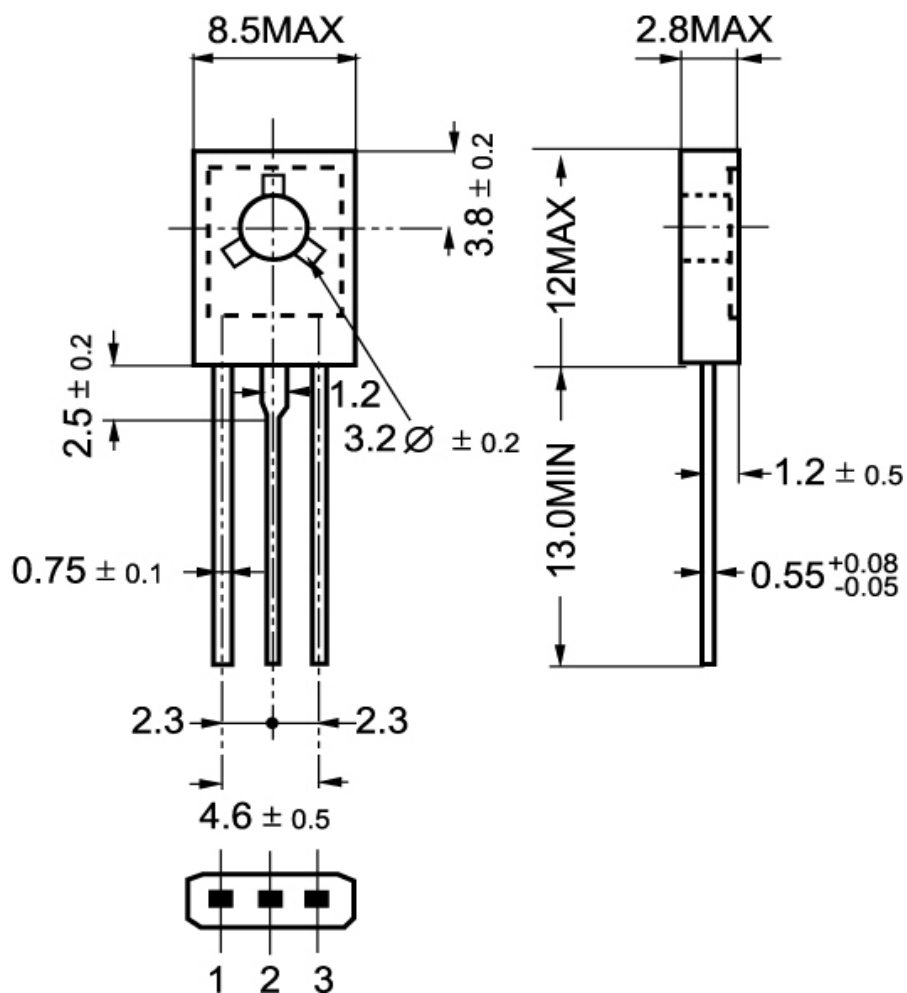


Fig.2 Outline dimensions