

Silicon PNP Power Transistors

2SB1009

DESCRIPTION

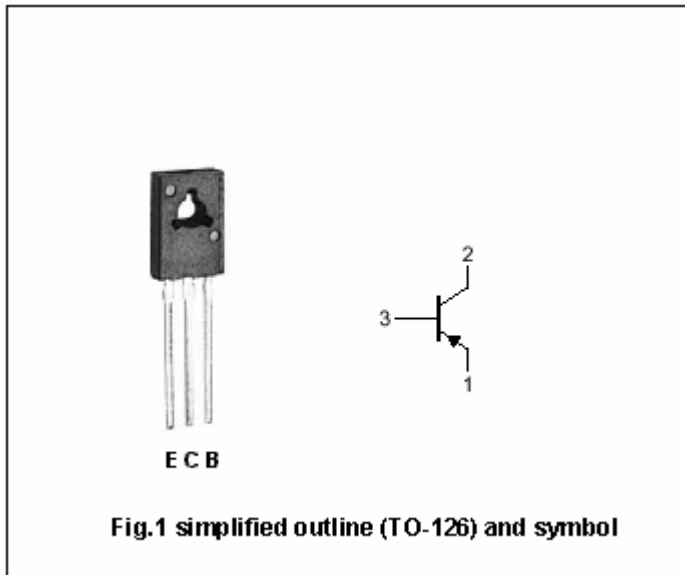
- With TO-126 package
- Complement to type 2SD1380

APPLICATIONS

- For use in low frequency power amplifier 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 _{CBO} | Collector-base voltage | Open emitter | -40 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -32 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current (DC) | | -2 | A |
| P _D | Total power dissipation | T _a =25°C | 0.1 | W |
| | | T _C =25°C | 10 | |
| T _j | Junction temperature | | 150 | °C |
| T _{stg} | Storage temperature | | -55~150 | °C |

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CHARACTERISTICS

T_j=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 | -32 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-2.0A; I _B =-0.2A | | | -0.8 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =-2.0A ; I _B =-0.2A | | | -2.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-20V; I _E =0 | | | -1 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-3V; I _C =0 | | | -1 | μA |
| h _{FE-1} | DC current gain | I _C =-20mA ; V _{CE} =-5V | 40 | | | |
| h _{FE-2} | DC current gain | I _C =-500mA ; V _{CE} =-5V | 82 | | 390 | |
| f _T | Transition frequency | I _C =-500mA ; V _{CE} =-5V | | 100 | | MHz |
| C _{OB} | Collector output capacitance | f=1MHz ; V _{CB} =-10V | | 50 | | pF |

PACKAGE OUTLINE

