

Silicon PNP Power Transistors

2SB1087

DESCRIPTION

- With TO-220C package
- High DC current gain
- DARLINGTON

APPLICATIONS

- For low frequency power amplifier and low speed power switching applications

PINNING

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

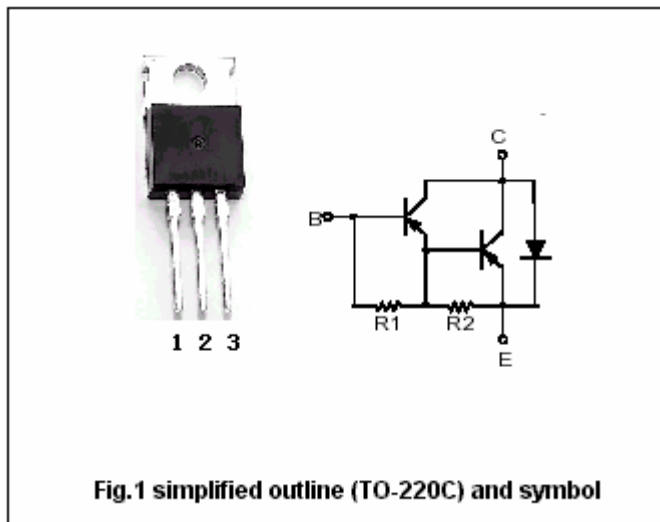


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|--------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | -100 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -100 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current-DC | | -5 | A |
| P _C | Collector power dissipation | T _a =25 | 1.5 | W |
| | | T _C =25 | 30 | |
| T _j | Junction temperature | | 150 | |
| T _{stg} | Storage temperature | | -55~150 | |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|------|------|-------|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =-30mA, I _B =0 | -100 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-2A, I _B =-2mA | | | -1.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =-2A, I _B =-2mA | | | -2.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-100V, I _E =0 | | | 1 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V, I _C =0 | | | -3 | mA |
| h _{FE-1} | DC current gain | I _C =-2A, V _{CE} =-5V | 2000 | | 20000 | |
| h _{FE-2} | DC current gain | I _C =-5A, V _{CE} =-5V | 500 | | | |

