

Silicon PNP Power Transistor

2SB885

DESCRIPTION

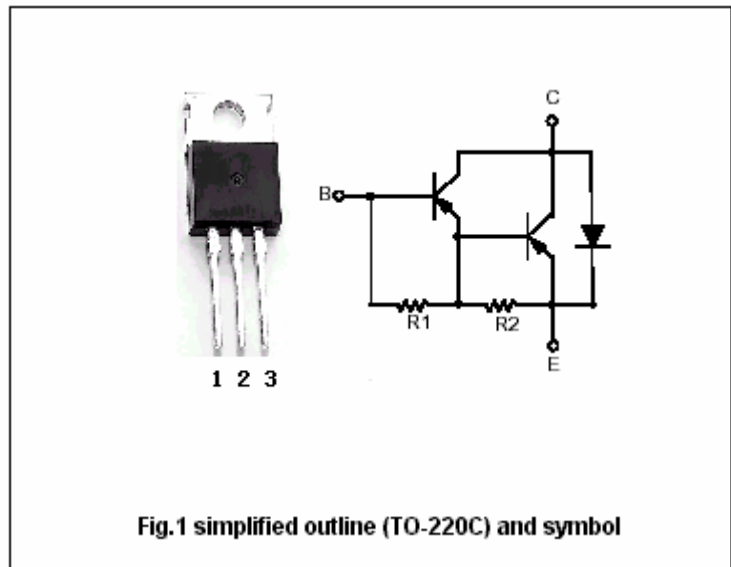
- With TO-220C package
- DARLINGTON
- High DC current gain
- Low collector saturation voltage
- Complement to type 2SD1195

APPLICATIONS

- For motor drivers,printer hammer drivers,relay drivers,voltage regulator control applications

PINNING

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

Absolute maximum ratings($T_c=25^\circ$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|----------|
| V_{CBO} | Collector-base voltage | Open emitter | -110 | V |
| V_{CEO} | Collector-emitter voltage | Open base | -100 | V |
| V_{EBO} | Emitter-base voltage | Open collector | -6 | V |
| I_C | Collector current-DC | | -5 | A |
| I_{CM} | Collector current-Pulse | | -8 | A |
| P_C | Collector power dissipation | $T_c=25^\circ$ | 35 | W |
| | | $T_a=25^\circ$ | 1.75 | |
| T_j | Junction temperature | | 150 | $^\circ$ |
| T_{stg} | Storage temperature | | -55~150 | $^\circ$ |

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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 =-50mA, R _{BE} =∞ | -100 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =-5mA, I _E =0 | -110 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-2.5A, I _B =-5mA | | | -1.5 | V |
| V _{BE sat} | Base-emitter saturation voltage | I _C =-2.5A, I _B =-5mA | | | -2.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-80V, I _E =0 | | | -0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V; I _C =0 | | | -3.0 | mA |
| h _{FE} | DC current gain | I _C =-2.5A; V _{CE} =-3V | 1500 | | | |
| f _T | Transition frequency | V _{CE} =-5V, I _C =-2.5A | | 20 | | MHz |

Switching times

| | | | | | | |
|------------------|---------------|--|--|-----|--|----|
| t _{on} | Turn-on time | I _C =-2A; V _{CC} =-50V I _{B1} =-I _{B2} =-4mA; R _L =25Ω | | 0.7 | | μs |
| t _{stg} | Storage time | | | 1.3 | | μs |
| t _f | Turn-off time | | | 1.5 | | μs |

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PACKAGE OUTLINE

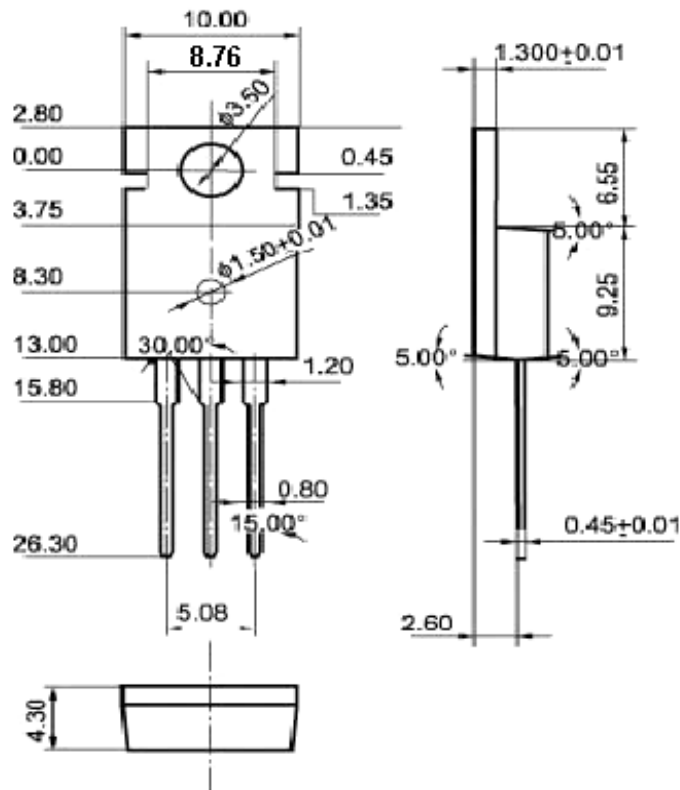


Fig.2 Outline dimensions