

Silicon PNP Power Transistors

2SB1105

DESCRIPTION

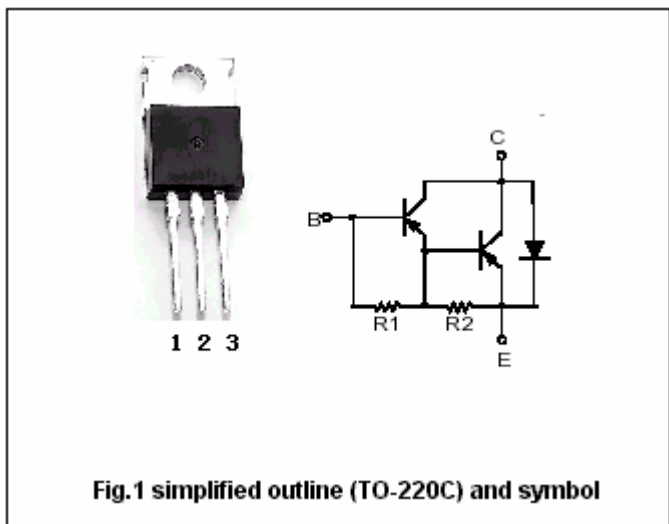
- With TO-220C package
- DARLINGTON
- High DC current gain
- Complement to type 2SD1605

APPLICATIONS

- Designed for use in low frequency power amplifier applications

PINNING

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



Absolute maximum ratings(Tc=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|----------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | -120 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -120 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -7 | V |
| I _C | Collector current-DC | | -3 | A |
| P _C | Collector power dissipation | T _C =25°C | 30 | W |
| 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 =-25mA, R _{BE} =∞ | -120 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =-50mA, I _C =0 | -7 | | | V |
| V _{CEsat-1} | Collector-emitter saturation voltage | I _C =-1.5A, I _B =-3mA | | | -1.5 | V |
| V _{CEsat-2} | Collector-emitter saturation voltage | I _C =-3A, I _B =-30mA | | | -3.0 | V |
| V _{BEsat-1} | Base-emitter saturation voltage | I _C =-1.5A, I _B =-3mA | | | -2.0 | V |
| V _{BEsat-2} | Base-emitter saturation voltage | I _C =-3A, I _B =-30mA | | | -3.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-120V, I _E =0 | | | -100 | μA |
| I _{CEO} | Collector cut-off current | V _{CE} =-100V, R _{BE} =∞ | | | -10 | μA |
| h _{FE} | DC current gain | I _C =-1.5A; V _{CE} =-3V | 1000 | | | |
| V _D | Diode forward voltage | I _D =-3A | | | 3.0 | V |

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PACKAGE OUTLINE

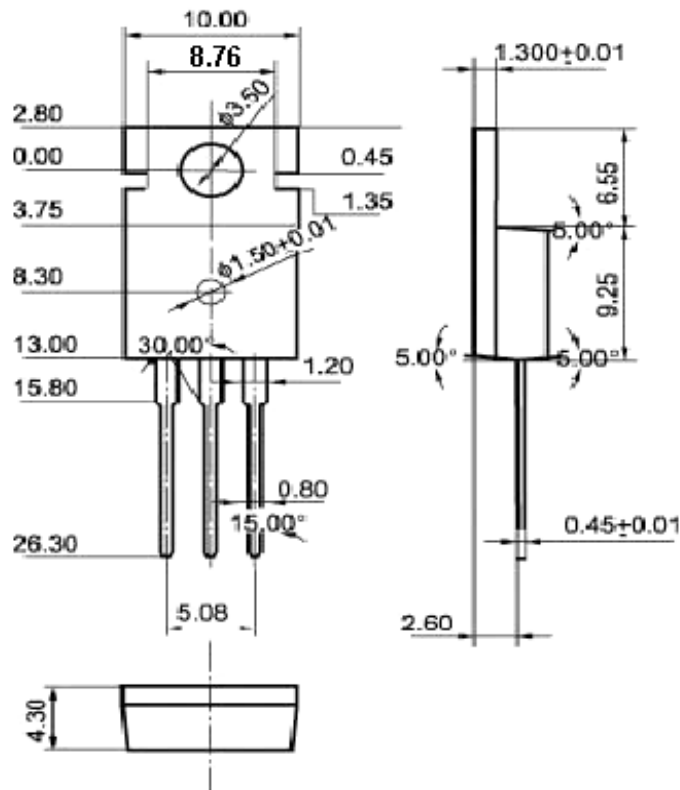


Fig.2 Outline dimensions