

Silicon PNP Power Transistors

2SA754

**DESCRIPTION**

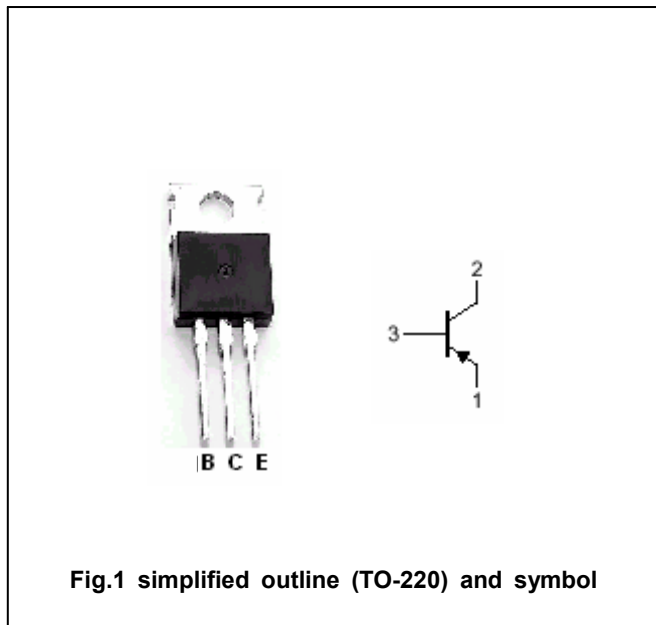
- With TO-220 package
- Low collector saturation voltage

**APPLICATIONS**

- Inverters;converters
- Power amplification
- Switching regulator ,driver

**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 <sub>CBO</sub> | Collector-base voltage      | Open emitter         | -50     | V    |
| V <sub>CEO</sub> | Collector-emitter voltage   | Open base            | -50     | V    |
| V <sub>EBO</sub> | Emitter-base voltage        | Open collector       | -5      | V    |
| I <sub>C</sub>   | Collector current           |                      | -2      | A    |
| P <sub>C</sub>   | Collector power dissipation | T <sub>C</sub> =25°C | 20      | W    |
| T <sub>j</sub>   | Junction temperature        |                      | 150     | °C   |
| T <sub>stg</sub> | Storage temperature         |                      | -55~150 | °C   |

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## CHARACTERISTICS

T<sub>j</sub>=25 °C unless otherwise specified

| SYMBOL               | PARAMETER                            | CONDITIONS                                   | MIN | TYP. | MAX  | UNIT |
|----------------------|--------------------------------------|--|-----|------|------|------|
| V <sub>(BR)CEO</sub> | Collector-emitter breakdown voltage  | I <sub>C</sub> =-25mA, I <sub>B</sub> =0     | -50 |      |      | V    |
| V <sub>(BR)CBO</sub> | Collector-base breakdown voltage     | I <sub>C</sub> =-1mA; I <sub>E</sub> =0      | -50 |      |      | V    |
| V <sub>(BR)EBO</sub> | Emitter-base breakdown voltage       | I <sub>E</sub> =-1mA; I <sub>C</sub> =0      | -5  |      |      | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =-1A; I <sub>B</sub> =-0.1A   |     |      | -1.0 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =-50V; I <sub>E</sub> =0     |     |      | -100 | μA   |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =-5V; I <sub>C</sub> =0      |     |      | -100 | μA   |
| h <sub>FE</sub>      | DC current gain                      | I <sub>C</sub> =-1A; V <sub>CE</sub> =-4V    | 35  |      | 320  |      |
| f <sub>T</sub>       | Transition frequency                 | I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-10V |     | 50   |      | MHz  |

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PACKAGE OUTLINE

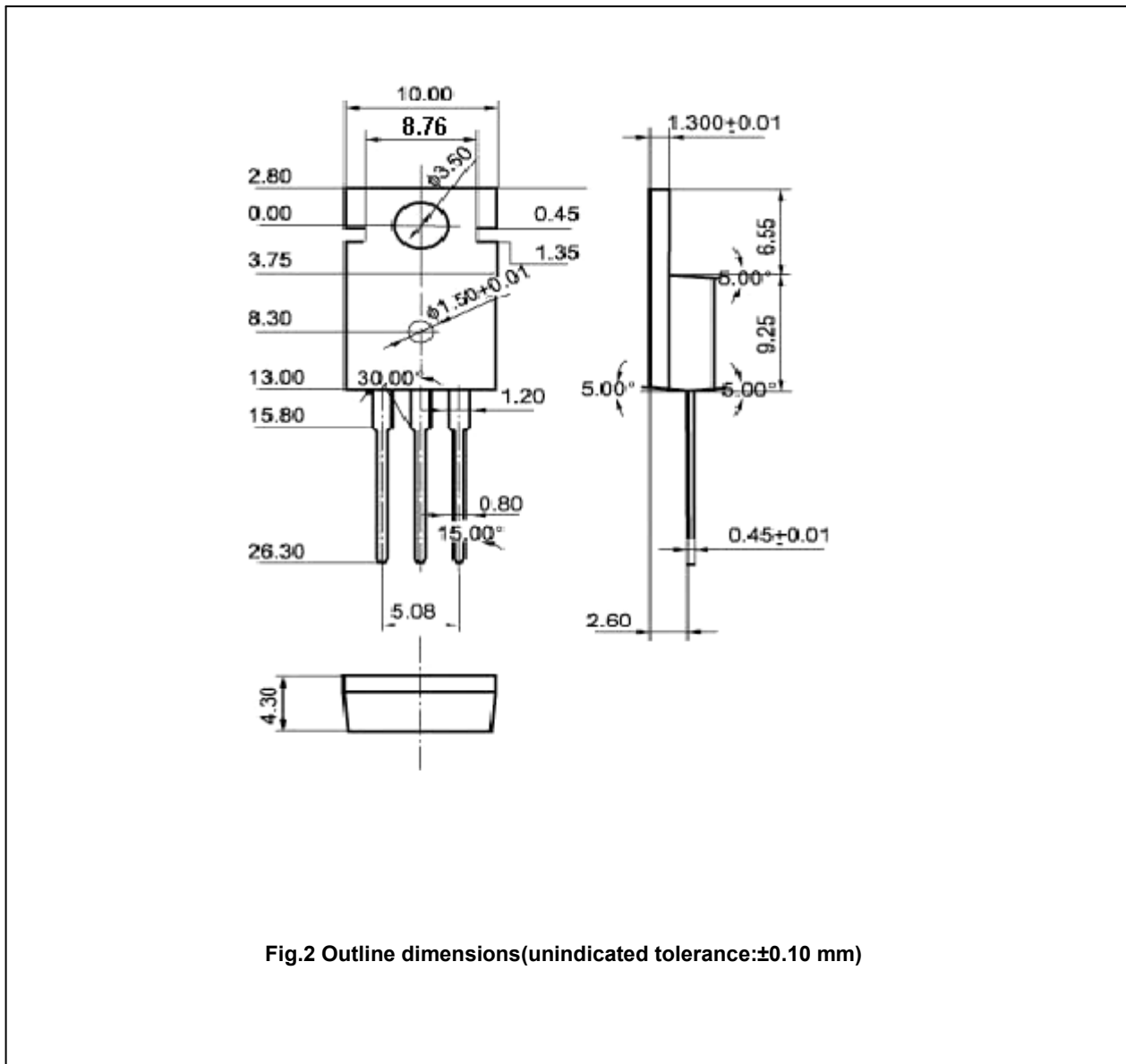


Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)