

**Silicon PNP Power Transistors**

**2SB755**

**DESCRIPTION**

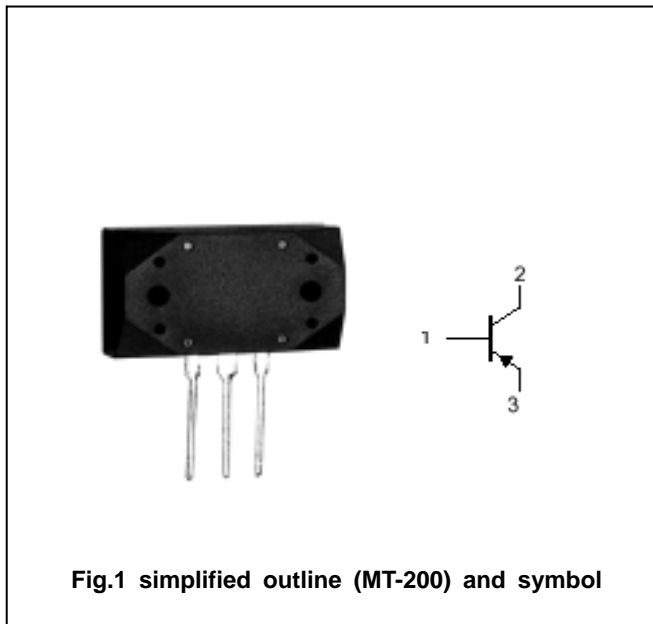
- With MT-200 package
- Complement to type 2SD845
- High transition frequency
- High breakdown voltage : $V_{CEO}=-150V(\text{min})$

**APPLICATIONS**

- For power amplifier applications

**PINNING(see Fig.2)**

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



**Absolute maximum ratings (Ta=25 )**

| SYMBOL    | PARAMETER                   | CONDITIONS     | VALUE   | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| $V_{CBO}$ | Collector-base voltage      | Open emitter   | -150    | V    |
| $V_{CEO}$ | Collector-emitter voltage   | Open base      | -150    | V    |
| $V_{EBO}$ | Emitter-base voltage        | Open collector | -5      | V    |
| $I_C$     | Collector current           |                | -12     | A    |
| $I_B$     | Base current                |                | -1.2    | A    |
| $P_C$     | Collector power dissipation | $T_C=25$       | 120     | W    |
| $T_j$     | Junction temperature        |                | 150     |      |
| $T_{stg}$ | Storage temperature         |                | -55~150 |      |

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## CHARACTERISTICS

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

| SYMBOL               | PARAMETER                            | CONDITIONS                                       | MIN  | TYP. | MAX  | UNIT |
|----------------------|--------------------------------------|--|------|------|------|------|
| V <sub>(BR)CEO</sub> | Collector-emitter breakdown voltage  | I <sub>C</sub> =-0.1A; I <sub>B</sub> =0         | -150 |      |      | V    |
| V <sub>(BR)EBO</sub> | Emitter-base breakdown voltage       | I <sub>E</sub> =-10mA; I <sub>C</sub> =0         | -5   |      |      | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =-5 A; I <sub>B</sub> =-0.5 A     |      |      | -2.0 | V    |
| V <sub>BE</sub>      | Base-emitter on voltage              | I <sub>C</sub> =-5A ; V <sub>CE</sub> =-5V       |      |      | -1.5 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =-150V; I <sub>E</sub> =0        |      |      | -50  | μ A  |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =-5V; I <sub>C</sub> =0          |      |      | -50  | μ A  |
| h <sub>FE</sub>      | DC current gain                      | I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V       | 55   |      | 160  |      |
| f <sub>T</sub>       | Transition frequency                 | I <sub>C</sub> =-1A ; V <sub>CE</sub> =-10V      |      | 20   |      | MHz  |
| C <sub>OB</sub>      | Output capacitance                   | I <sub>E</sub> =0; V <sub>CB</sub> =-10V; f=1MHz |      | 450  |      | pF   |

◆ h<sub>FE</sub> classifications

| R      | O      |
|--------|--------|
| 55-110 | 80-160 |

PACKAGE OUTLINE

