

Silicon NPN Power Transistors

2SC2774

DESCRIPTION

- With MT-200 package
- High power dissipation
- High current capability

APPLICATIONS

- For audio power amplifier and general purpose applications

PINNING(see Fig.2)

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

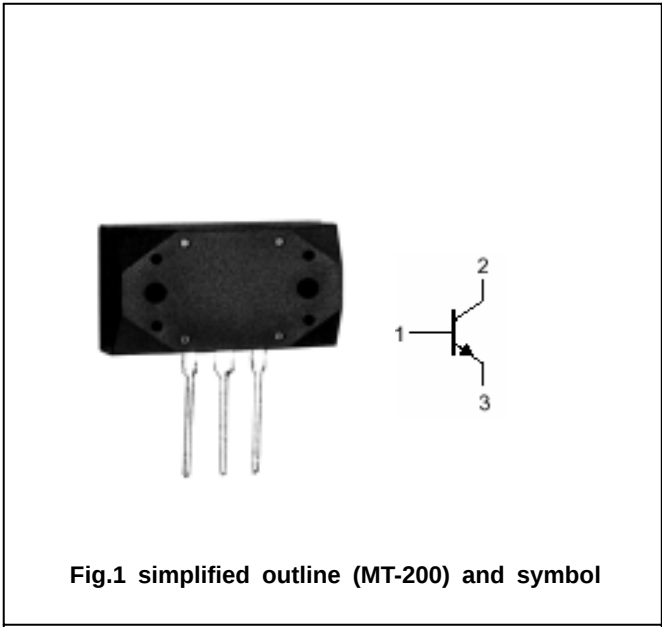


Fig.1 simplified outline (MT-200) and symbol

Absolute maximum ratings(Ta=25 )

| SYMBOL    | PARAMETER                   | CONDITIONS     | VALUE   | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| $V_{CBO}$ | Collector-base voltage      | Open emitter   | 200     | V    |
| $V_{CEO}$ | Collector-emitter voltage   | Open base      | 200     | V    |
| $V_{EBO}$ | Emitter-base voltage        | Open collector | 6       | V    |
| $I_C$     | Collector current           |                | 17      | A    |
| $I_B$     | Base current                |                | 5       | A    |
| $P_C$     | Collector power dissipation | $T_C=25$       | 200     | W    |
| $T_j$     | Junction temperature        |                | 150     |      |
| $T_{stg}$ | Storage temperature         |                | -55~150 |      |

## Silicon NPN Power Transistors

## 2SC2774

## 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> =25mA ; I <sub>B</sub> =0        | 200 |      |     | V    |
| V <sub>(BR)EBO</sub> | Emitter-base breakdown voltage       | I <sub>E</sub> =1mA ; I <sub>C</sub> =0         | 6   |      |     | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =5A; I <sub>B</sub> =0.5A        |     |      | 2.0 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =200V; I <sub>E</sub> =0        |     |      | 100 | μ A  |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =5V; I <sub>C</sub> =0          |     |      | 100 | μ A  |
| h <sub>FE</sub>      | DC current gain                      | I <sub>C</sub> =5A ; V <sub>CE</sub> =4V        | 50  |      | 140 |      |
| C <sub>ob</sub>      | Output capacitance                   | I <sub>E</sub> =0 ; V <sub>CB</sub> =10V;f=1MHz |     | 300  |     | pF   |
| f <sub>T</sub>       | Transition frequency                 | I <sub>C</sub> =2A ; V <sub>CE</sub> =12V       |     | 20   |     | MHz  |

◆ h<sub>FE</sub> classifications

| O      | Y      |
|--------|--------|
| 50-100 | 70-140 |

## Silicon NPN Power Transistors

2SC2774

## PACKAGE OUTLINE

