

Silicon NPN Power Transistors

2SC2793

DESCRIPTION

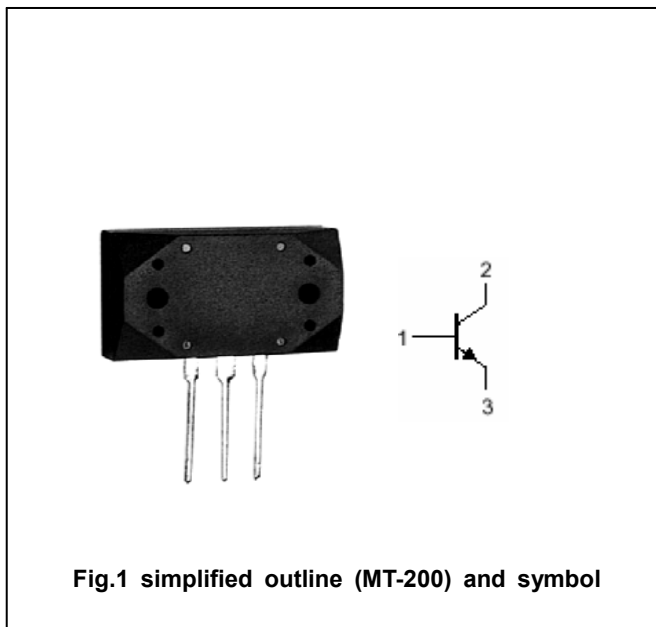
- With MT-200 package
- High collector breakdown voltage
- Excellent switching times

APPLICATIONS

- High speed and high voltage switching
- Switching regulator
- High speed DC-DC converter

PINNING(see Fig.2)

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



ABSOLUTE MAXIMUM RATINGS(T_C=25℃)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 900 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 800 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I _C | Collector current | | 5 | A |
| I _{CM} | Collector current-peak | | 7 | A |
| I _B | Base current | | 3 | A |
| P _C | Collector power dissipation | T _C =25℃ | 100 | W |
| T _j | Junction temperature | | 150 | ℃ |
| T _{stg} | Storage temperature | | -55~150 | ℃ |

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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 =10mA ; I _B =0 | 800 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =0 | 900 | | | V |
| V _{CE(sat)} | Collector-emitter saturation voltage | I _C =3 A ; I _B =0.6 A | | | 1.0 | V |
| V _{BE(sat)} | Base-emitter saturation voltage | I _C =3 A ; I _B =0.6 A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =800V ; I _E =0 | | | 100 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =7V ; I _C =0 | | | 1 | mA |
| h _{FE-1} | DC current gain | I _C =10mA ; V _{CE} =5V | 10 | | | |
| h _{FE-2} | DC current gain | I _C =3A ; V _{CE} =5V | 10 | | | |

Switching times

| | | | | | | |
|------------------|--------------|---|--|--|-----|----|
| t _r | Rise time | V _{CC} =400V , I _C =3A, I _{B1} =0.3A ; I _{B2} =-0.8A | | | 1.0 | μs |
| t _{stg} | Storage time | | | | 3.5 | μs |
| t _f | Fall time | | | | 1.0 | μs |

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PACKAGE OUTLINE

