

Silicon NPN Power Transistors

2SC2189

DESCRIPTION

- With TO-3 package
- Wide area of safe operation

APPLICATIONS

- For high speed switching and power amplifier applications

PINNING(see Fig.2)

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Base |
| 2 | Emitter |
| 3 | Collector |

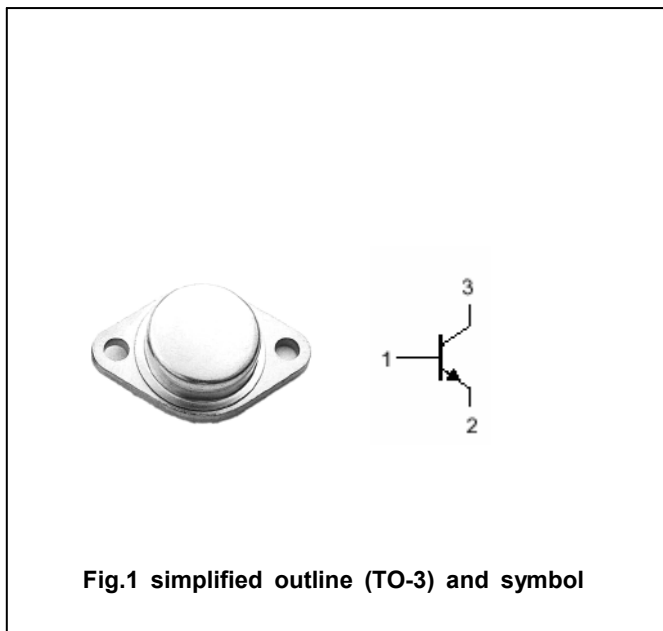


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 150 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 100 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I _C | Collector current | | 10 | A |
| P _C | Collector power dissipation | T _C =25□ | 80 | 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 =50mA ; I _B =0 | 100 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =0 | 150 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA ; I _C =0 | 5 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =4A; I _B =0.8A | | | 0.8 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =4A; I _B =0.8A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =150V; I _E =0 | | | 0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 0.1 | mA |
| h _{FE} | DC current gain | I _C =4A ; V _{CE} =5V | 40 | | | |

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PACKAGE OUTLINE



Fig.2 outline dimensions (unindicated tolerance:±0.1mm)