

Silicon NPN Power Transistors

2SD1175

DESCRIPTION

- With TO-3 package
- Built-in damper diode
- High voltage ,high power dissipation
- Wide area of safe operation

APPLICATIONS

- Line-operated horizontal deflection output applications

PINNING(see fig.2)

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

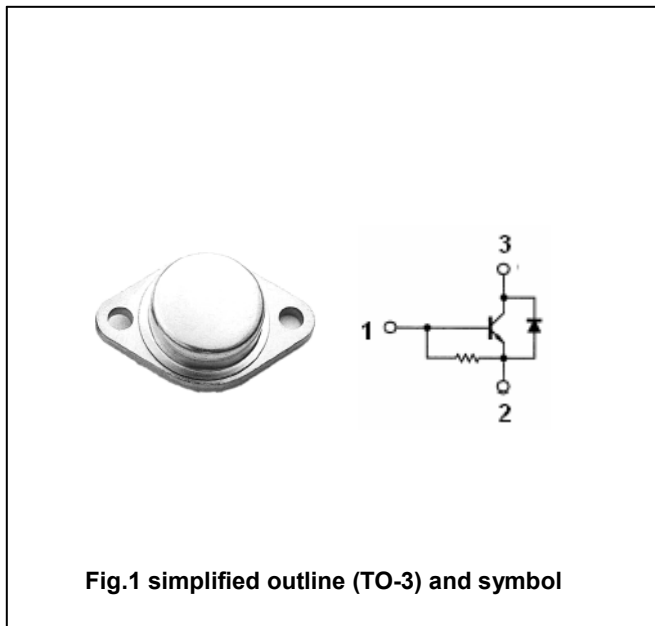


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|---------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 1500 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 1500 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I _C | Collector current | | 5 | A |
| P _T | Total power dissipation | T _C =25□ | 100 | W |
| T _j | Junction temperature | | 150 | □ |
| T _{stg} | Storage temperature | | -65~150 | □ |

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|-----|------|
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =500mA; I _C =0; | 5 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =4.0 A; I _B =0.8 A | | | 5.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =4.0 A; I _B =0.8 A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =750V; I _E =0 | | | 50 | μA |
| | | V _{CB} =1500V; I _E =0 | | | 1.0 | mA |
| h _{FE-1} | DC current gain | I _C =1A ; V _{CE} =5V | 10 | | 30 | |
| h _{FE-2} | DC current gain | I _C =4A ; V _{CE} =10V | 5 | | | |
| V _F | Diode forward voltage | I _F =4A | | | 2.5 | V |

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PACKAGE OUTLINE

