

Silicon NPN Power Transistors

2SD917

DESCRIPTION

- With TO-3PN package
- High speed switching
- High V_{CBO}
- Large collector power dissipation

APPLICATIONS

- For horizontal deflection output applications

PINNING

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

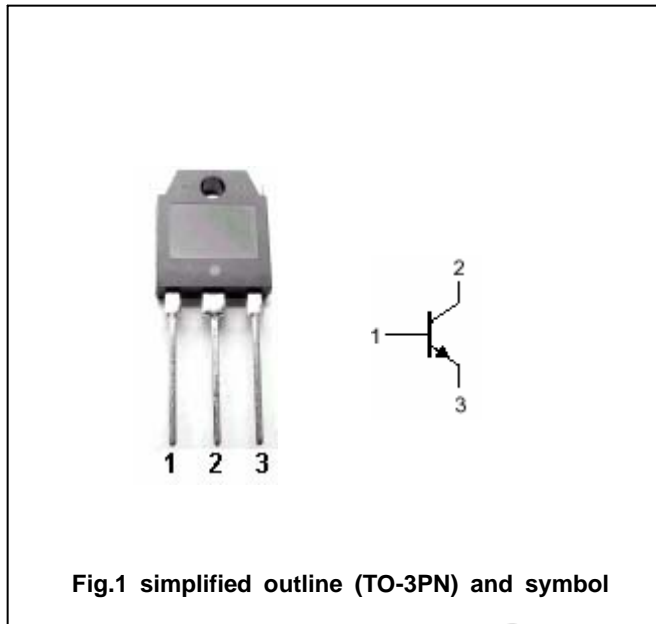


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 330 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 200 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 6 | V |
| I_C | Collector current (DC) | | 7 | A |
| I_{CM} | Collector current (Pulse) | | 10 | A |
| I_{CM} | Collector current (Nonrepeattive) | | 15 | A |
| P_C | Collector power dissipation | $T_C=25$ | 70 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -55~150 | |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|---------|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =30mA ; I _B =0 | 200 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA; I _E =0 | 330 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =5A; I _B =0.5A | | | 1.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =5A; I _B =0.5A | | | 1.2 | V |
| I _{CES} | Collector cut-off current | V _{CE} =330V; V _{BE} =0 T _a =100 | | | 1 15 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =6V; I _C =0 | | | 1 | mA |
| h _{FE-1} | DC current gain | I _C =0.5A ; V _{CE} =4V | 120 | | 240 | |
| h _{FE-2} | DC current gain | I _C =5A ; V _{CE} =4V | 15 | | | |
| t _f | Fall time | I _C =5A I _{B1} =0.8A, V _{EB} =-5V, R _B =0.5 | | | 0.75 | μs |

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PACKAGE OUTLINE

