

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SC2578

DESCRIPTION

- With TO-3PN package
- High power dissipation
- High current capability

APPLICATIONS

- For audio frequency power amplifier applications

PINNING

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

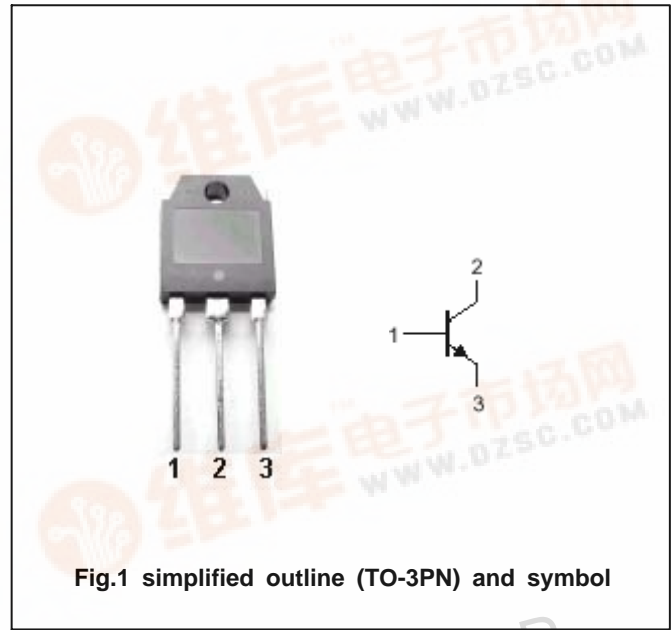


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Ta=)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|--------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 140 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 100 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 6 | V |
| I _C | Collector current | | 7 | 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)CBO} | Collector-base breakdown voltage | I _C =5mA; I _E =0 | 140 | | | V |
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =10mA ; R _{BE} = | 100 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =5mA; I _C =0 | 6 | | | V |
| I _{CBO} | Collector cut-off current | V _{CB} =100V; I _E =0 | | | 0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =4V; I _C =0 | | | 0.1 | mA |
| h _{FE} | DC current gain | I _C =3A ; V _{CE} =4V | 50 | | | |
| V _{CE(sat)} | Collector-emitter saturation voltage | I _C =3A ; I _B =0.3A | | | 2 | V |
| f _T | Transition frequency | I _C =0.5A ; V _{CE} =10V | | 20 | | MHz |

