

Silicon NPN Power Transistors

2SD1180

DESCRIPTION

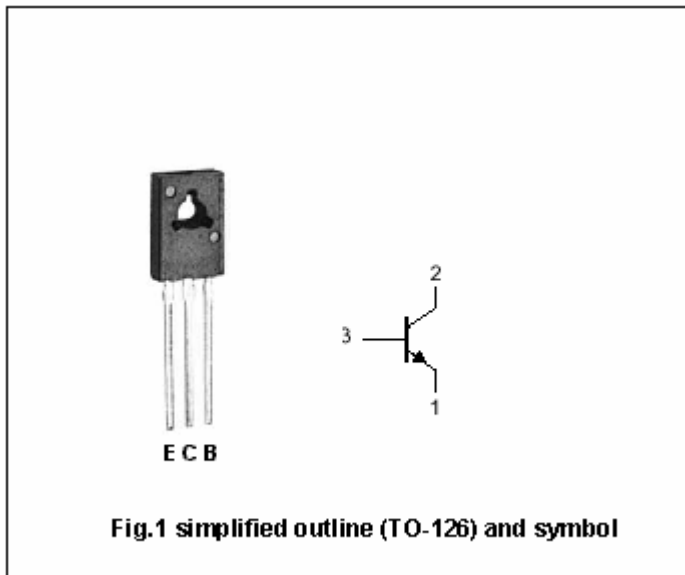
- With TO-126 package
- Low collector saturation voltage

APPLICATIONS

- Designed for use in audio and radio frequency power amplifiers

PINNING

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



Absolute maximum ratings(Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 120 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 110 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I_C | Collector current | | 1.5 | A |
| I_{CM} | Collector current-peak | | 2.5 | A |
| P_C | Collector power dissipation | $T_a=25$ | 1.2 | W |
| | | $T_C=25$ | 20 | |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -55~150 | |

Silicon NPN Power Transistors

2SD1180

CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =10mA; I _B =0 | | 110 | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =100 μA; I _E =0 | | 120 | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =100 μA; I _C =0 | | 5 | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =1A; I _B =0.2A | | | 0.7 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =1A; I _B =0.2A | | | 1.3 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =120V; I _E =0 | | | 1.0 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =3V; I _C =0 | | | 1.0 | μA |
| h _{FE} | DC current gain | I _C =150mA; V _{CE} =5V | 100 | | | |

PACKAGE OUTLINE

