

Silicon NPN Power Transistors

2SC1448

DESCRIPTION

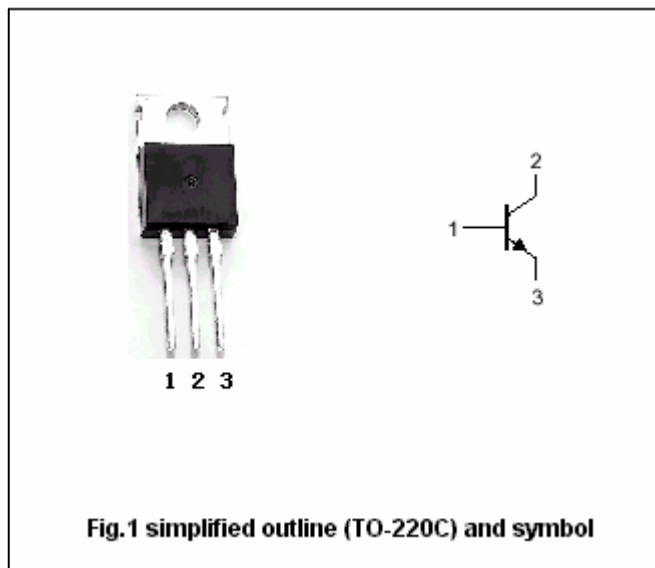
- With TO-220 package
- High collector-emitter breakdown voltage
: $V_{CEO}=150V(\text{min})$

APPLICATIONS

- Power amplifier applications
- Vertical output applications

PINNING

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



Absolute maximum ratings ($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|------------------------|---------|------------------|
| V_{CBO} | Collector-base voltage | Open emitter | 150 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 150 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I_C | Collector current | | 1.5 | A |
| I_B | Base current | | 0.5 | A |
| P_C | Collector power dissipation | $T_a=25^\circ\text{C}$ | 1.5 | W |
| | | $T_C=25^\circ\text{C}$ | 25 | |
| T_j | Junction temperature | | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage temperature | | -55~150 | $^\circ\text{C}$ |

Silicon NPN Power Transistors

2SC1448

CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =30mA; I _B =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 =0.5A; I _B =50mA | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =150V; I _E =0 | | | 20 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 20 | μA |
| h _{FE} | DC current gain | I _C =0.5A; V _{CE} =10V | 40 | | 140 | |
| f _T | Transition frequency | I _C =0.5A; V _{CE} =10V | | 5 | | MHz |

Silicon NPN Power Transistors

2SC1448

PACKAGE OUTLINE

