

Silicon NPN Power Transistors

2SD1037

DESCRIPTION

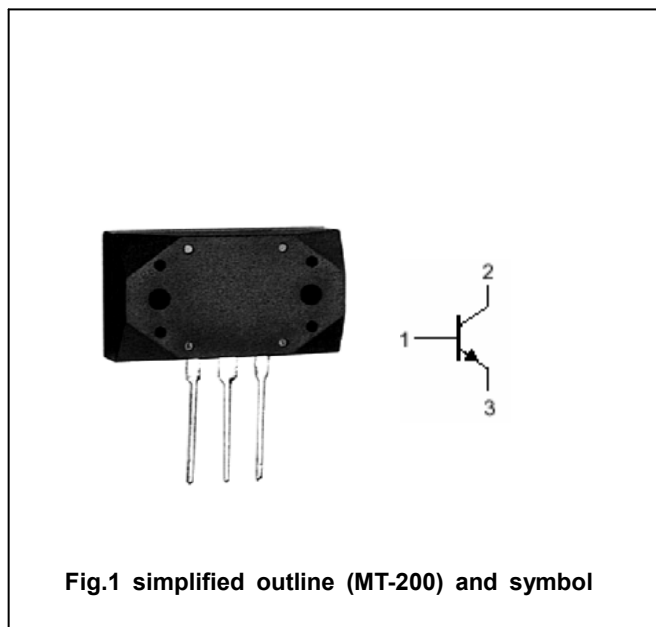
- With MT-200 package
- Excellent safe operating area
- High current capability

APPLICATIONS

- For electrical supply ,DC-DC converters and low frequency power amplifier applications

PINNING(see Fig.2)

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



Absolute maximum ratings (Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|----------|
| V_{CBO} | Collector-base voltage | Open emitter | 150 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 120 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 6 | V |
| I_C | Collector current | | 30 | A |
| P_C | Collector power dissipation | $T_C=25^\circ$ | 180 | W |
| T_j | Junction temperature | | 150 | $^\circ$ |
| T_{stg} | Storage temperature | | -55~150 | $^\circ$ |

Silicon NPN Power Transistors

2SD1037

CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =50mA; I _B =0 | 120 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =10 A; I _B =1 A | | | 0.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =10 A; I _B =1 A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =80V; I _E =0 | | | 5 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =6V; I _C =0 | | | 5 | μA |
| h _{FE} | DC current gain | I _C =10A ; V _{CE} =4V | 20 | | | |
| f _T | Transition frequency | I _C =1A ; V _{CE} =4V | | 1.5 | | MHz |
| C _{OB} | Output capacitance | I _E =0; V _{CB} =10V; f=1MHz | | 210 | | pF |

Silicon NPN Power Transistors

2SD1037

PACKAGE OUTLINE

