

Silicon NPN Power Transistors

2SC1619

DESCRIPTION

- With TO-3 package
- High current capacity
- Wide safe oprating area

APPLICATIONS

- For audio frequency output applications

PINNING(see fig.2)

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Base |
| 2 | Emitter |
| 3 | Collector |

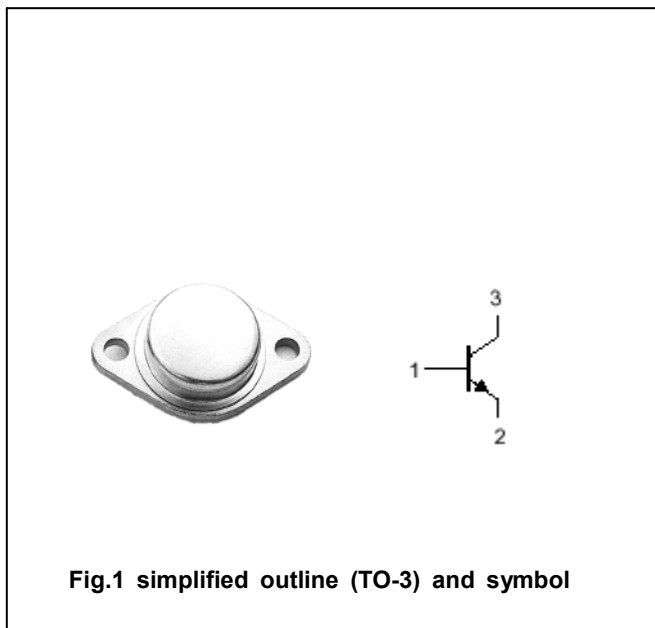


Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 100 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 80 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 6 | V |
| I_C | Collector current | | 6 | A |
| I_{CM} | Collector current-peak | | 10 | A |
| P_C | Collector power dissipation | $T_C=25℃$ | 50 | W |
| T_j | Junction temperature | | 150 | ℃ |
| T_{stg} | Storage temperature | | -55~150 | ℃ |

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{CEQ(SUS)} | Collector-emitter sustaining voltage | I _C =100mA; I _B =0 | 80 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA; I _C =0 | 6 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =4A; I _B =0.4 A | | | 2.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =4A; I _B =0.4 A | | | 2.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =100V; I _E =0 | | | 0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =6V; I _C =0 | | | 0.1 | mA |
| h _{FE} | DC current gain | I _C =3A ; V _{CE} =4V | 20 | | 180 | |
| f _T | Transition frequency | I _C =0.5A ; V _{CE} =12V | | 10 | | MHz |

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PACKAGE OUTLINE

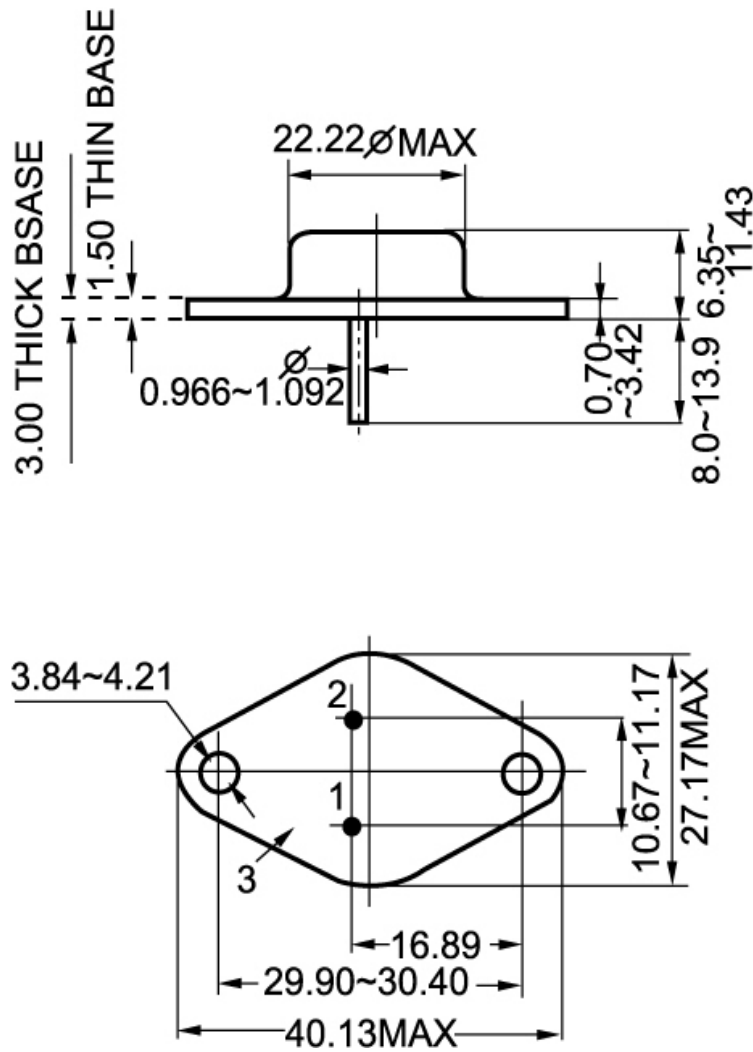


Fig.2 Outline dimensions