

Silicon NPN Power Transistors

2SC1030

DESCRIPTION

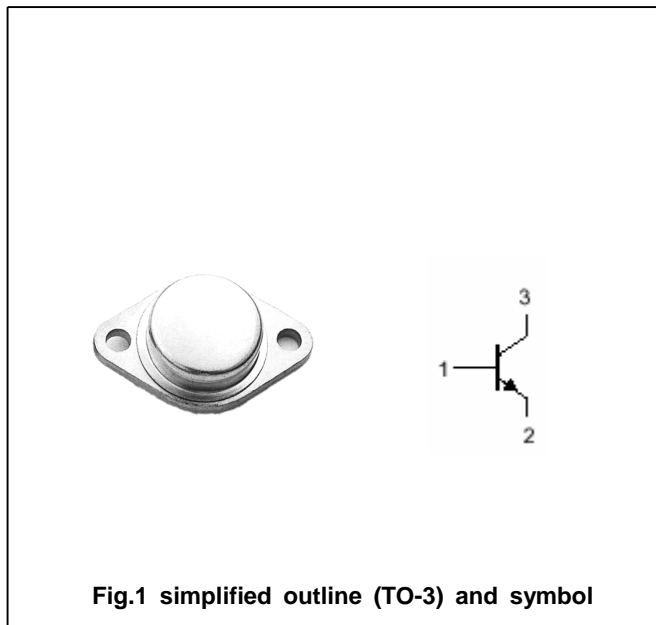
- With TO-3 package
- Wide area of safe operation

APPLICATIONS

- For low frequency power amplifier applications

PINNING(see Fig.2)

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

**Absolute maximum ratings(Ta=?)**

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 150 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 80 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I_C | Collector current | | 6 | A |
| P_C | Collector power dissipation | $T_C=25^\circ$ | 50 | 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 _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =0.1A ; I _B =0 | 80 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =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 =5A; I _B =1A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =100V; I _E =0 | | | 0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 0.1 | mA |
| h _{FE-1} | DC current gain | I _C =1A ; V _{CE} =5V | 35 | | 200 | |
| h _{FE-2} | DC current gain | I _C =5A ; V _{CE} =5V | 22 | | | |
| f _T | Transition frequency | I _C =1A ; V _{CE} =5V | | 10 | | MHz |

U **h_{FE-1} classifications**

| A | B | C |
|-------|--------|---------|
| 35-70 | 60-120 | 100-200 |

PACKAGE OUTLINE

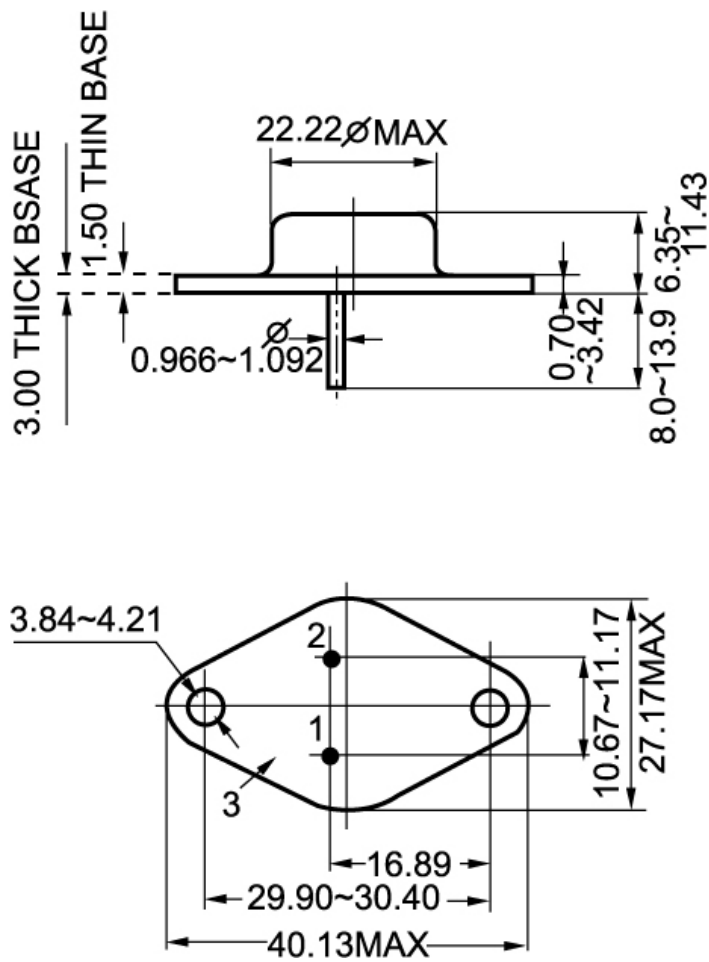


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)