

Silicon NPN Power Transistors

2SD198

DESCRIPTION

www.datasheet4u.com

- With TO-3 package
- High breakdown voltage

APPLICATIONS

- voltage regulator
- Inverters
- Switching mode power supply

PINNING(see Fig.2)

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

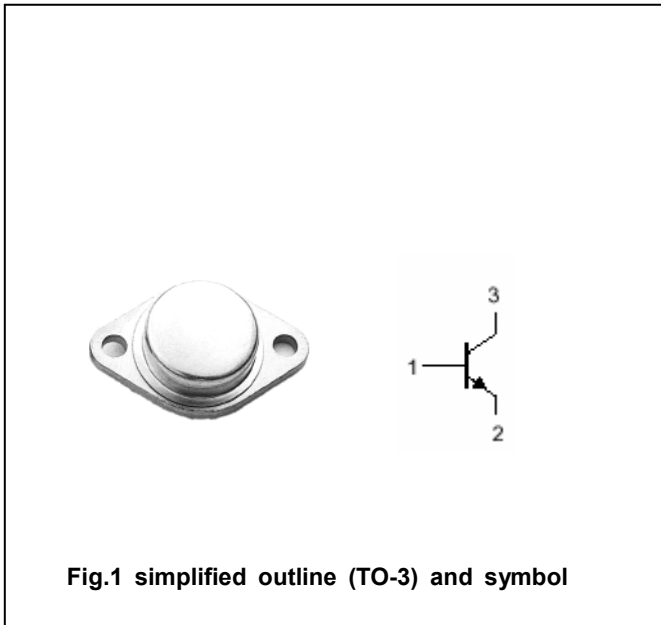


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 300 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 300 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 6 | V |
| I _C | Collector current | | 1 | A |
| P _C | Collector power dissipation | T _C =75□ | 25 | W |
| T _j | Junction temperature | | 165 | □ |
| T _{stg} | Storage temperature | | -55~200 | □ |

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CHARACTERISTICS

T_j=25°C unless otherwise specified

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| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =100mA ; I _B =0 | 300 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA ; I _C =0 | 6 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =1.0A; I _B =0.1A | | | 1.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =1.0A; I _B =0.1A | | | 1.5 | V |
| I _{CB0} | Collector cut-off current | V _{CB} =300V; 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 =0.1A ; V _{CE} =5V | 30 | | 300 | |
| f _T | Transition frequency | I _C =0.5A ; V _{CE} =10V | | 25 | | MHz |

PACKAGE OUTLINE

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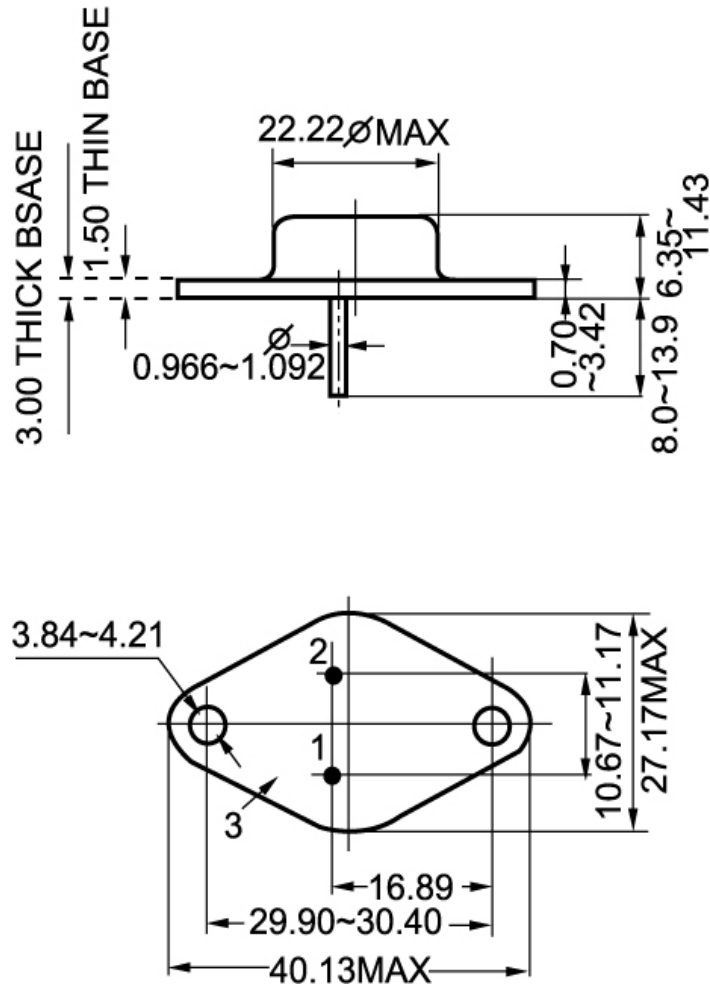


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)