

Silicon NPN Power Transistors

2SC2022

DESCRIPTION

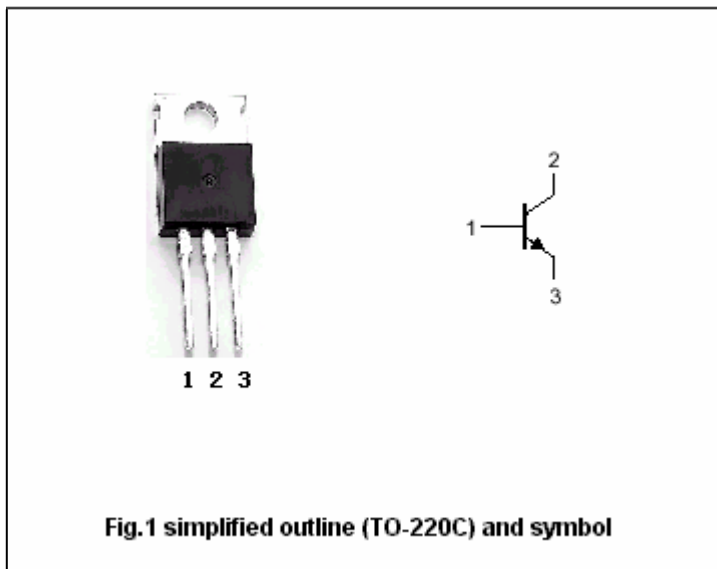
- With TO-220C package
- High voltage

APPLICATIONS

- Series regulator, switch, and general purpose 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 | 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 dissipation | $T_C=25^\circ\text{C}$ | 30 | W |
| T_j | Junction temperature | | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage temperature | | -50~150 | $^\circ\text{C}$ |

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =25mA ; I _B =0 | 300 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =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 =500mA ; I _B =100mA | | | 1.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =300V ; I _E =0 | | | 1.0 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =6V ; I _C =0 | | | 1.0 | mA |
| h _{FE} | DC current gain | I _C =200mA ; V _{CE} =4V | 30 | | | |
| f _T | Transition frequency | I _C =100mA ; V _{CE} =12V | | 10 | | MHz |

PACKAGE OUTLINE

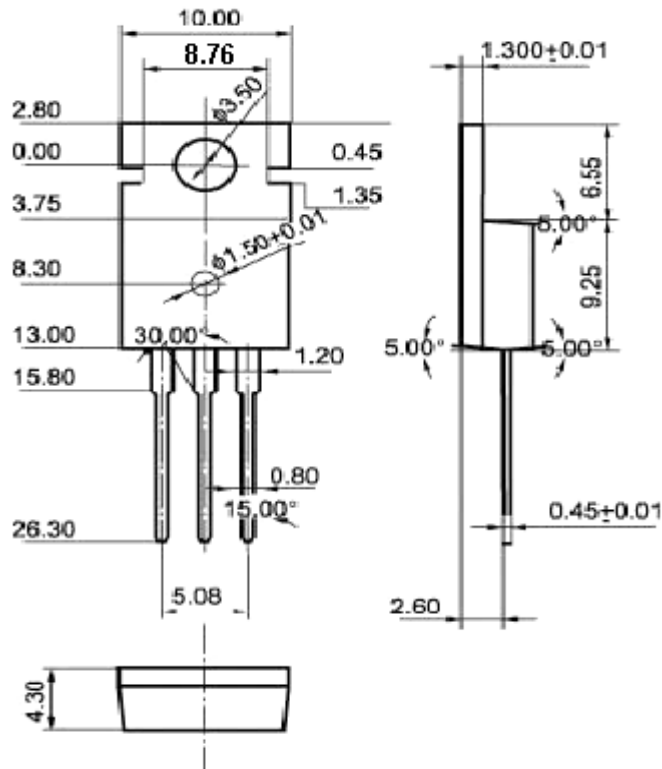


Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)