

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SC4507

DESCRIPTION

- With TO-220F package
- High breakdown voltage
- High speed switching performance

APPLICATIONS

- For switching regulator and general purpose power amplifier applications

PINNING

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

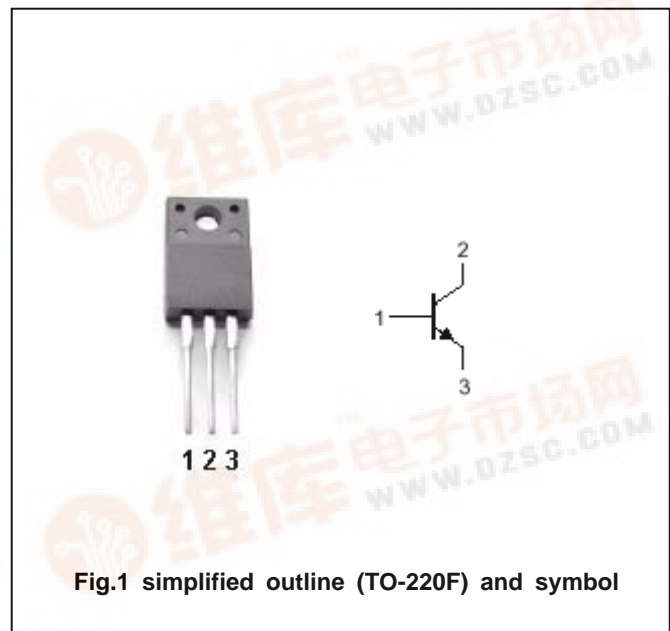


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|---------------------------|--------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 500 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 400 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I _C | Collector current | | 5 | A |
| P _C | Collector dissipation | T _C =25 | 40 | 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 _{CE0(SUS)} | Collector-emitter sustainig voltage | I _C =100mA ; I _B =0 | 400 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =0 | 500 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA ; I _C =0 | 7 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =2A ; I _B =0.4A | | | 0.8 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =2A ; I _B =0.4A | | | 1.2 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =450V ; I _E =0 | | | 100 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =7V ; I _C =0 | | | 100 | μ A |
| h _{FE-1} | DC current gain | I _C =0.5A ; V _{CE} =5V | 25 | | 65 | |
| h _{FE-2} | DC current gain | I _C =2A ; V _{CE} =5V | 20 | | | |

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PACKAGE OUTLINE

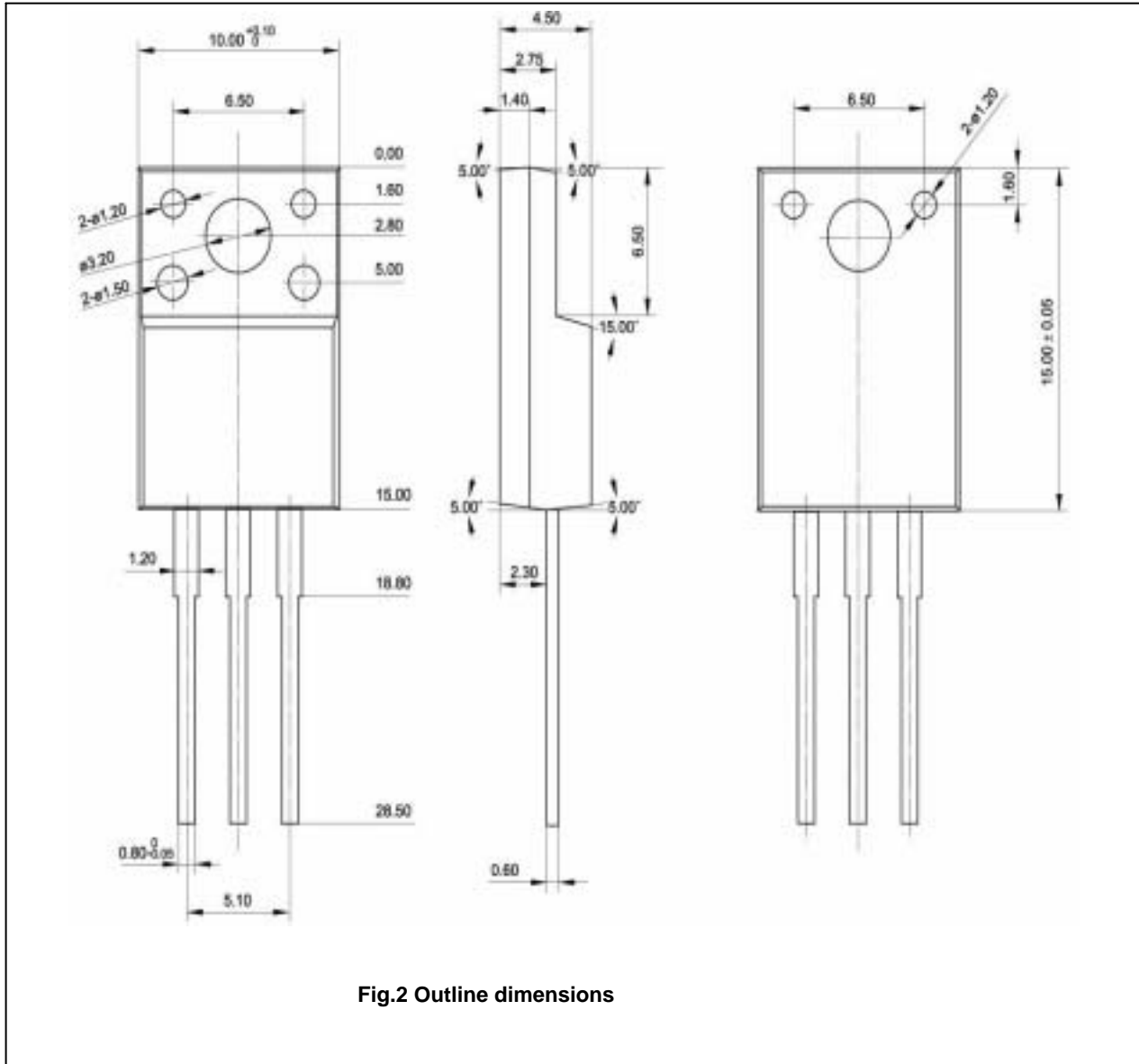


Fig.2 Outline dimensions