

Silicon PNP Power Transistors

2SA1308

DESCRIPTION

- With TO-220F package
- Low collector saturation voltage

APPLICATIONS

- High current switching applications

PINNING

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

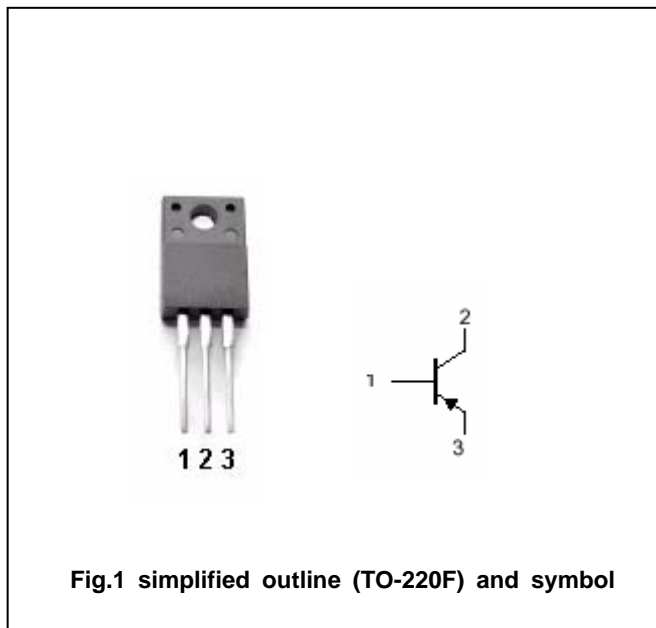


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|---------------------------|--------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | -100 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -100 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -7 | V |
| I _C | Collector current | | -5 | A |
| I _{CM} | Collector current-peak | | -8 | A |
| P _C | Collector dissipation | T _C =25 | 30 | 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 _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =-10mA ; I _B =0 | -100 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-3A;I _B =-0.15A | | | -0.4 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =-3A;I _B =-0.15A | | | -1.2 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-100V;I _E =0 | | | -1 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =-7V; I _C =0 | | | -1 | μ A |
| h _{FE-1} | DC current gain | I _C =-1A ; V _{CE} =-1V | 70 | | 240 | |
| h _{FE-2} | DC current gain | I _C =-3A ; V _{CE} =-1V | 30 | | | |
| f _T | Transition frequency | I _C =-1A ; V _{CE} =-4V | | 60 | | MHz |
| C _{OB} | Output capacitance | I _E =0 ; V _{CB} =-10V;f=1MHz | | 200 | | pF |

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PACKAGE OUTLINE

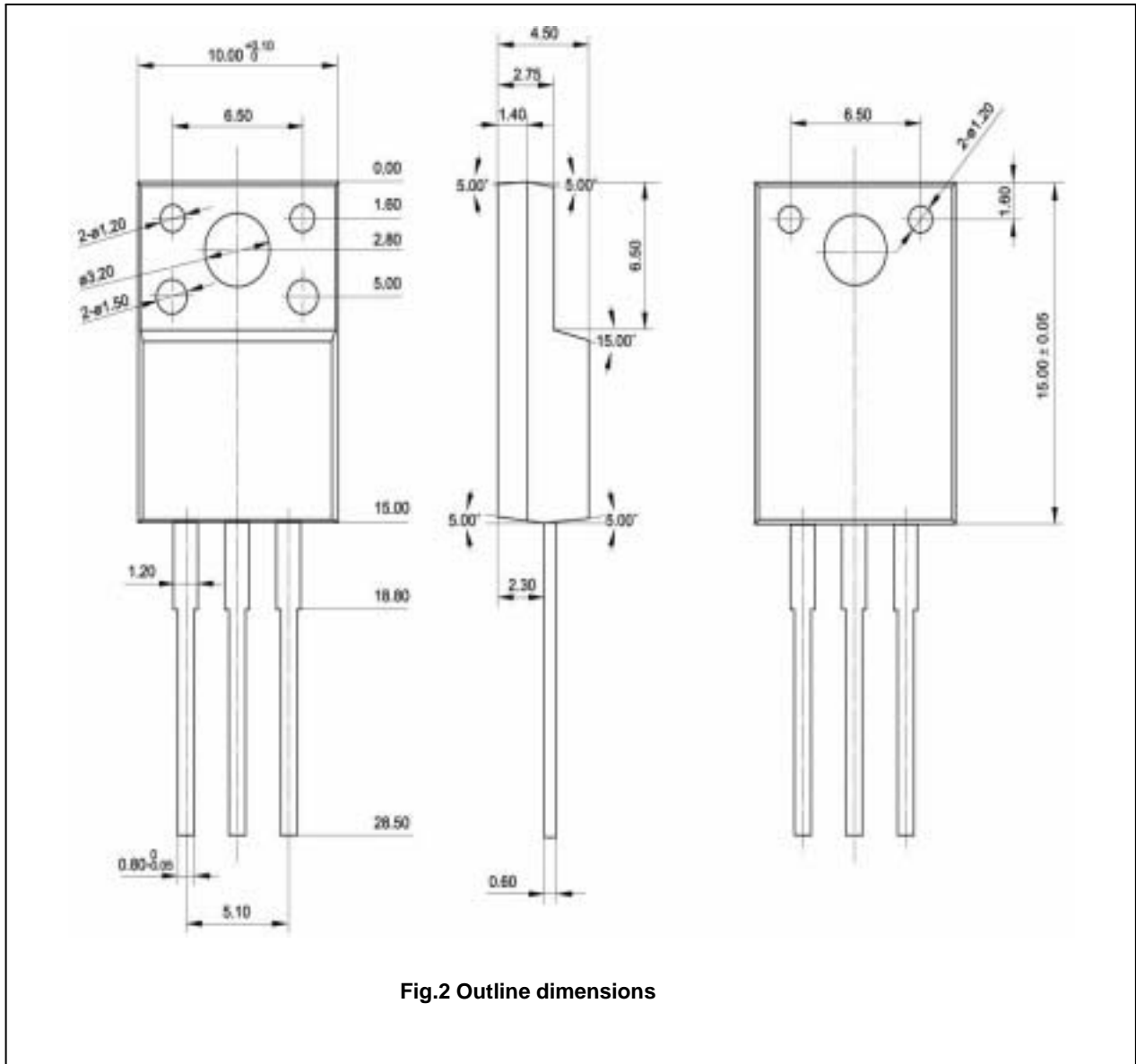


Fig.2 Outline dimensions