

Silicon NPN Power Transistors

BU1508AF

DESCRIPTION

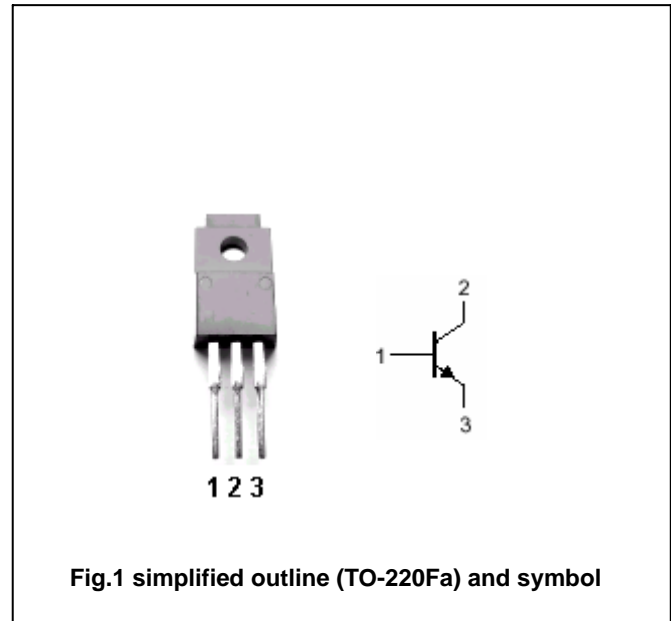
- With TO-220Fa package
- High voltage
- High speed switching

APPLICATIONS

- For use in horizontal deflection circuits of colour TV receivers.

PINNING

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



Absolute maximum ratings (Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|---------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 1500 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 700 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 7.5 | V |
| I_C | Collector current | | 8 | A |
| I_{CM} | Collector current (peak) | | 15 | A |
| I_B | Base current | | 4 | A |
| I_{BM} | Base current (peak) | | 6 | A |
| P_T | Total power dissipation | $T_C=25$ | 35 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -65~150 | |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|---|-----|------|------------|------|
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA ; I _C =0 | 7.5 | 13.5 | | V |
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =100mA ; I _B =0; L=25mH | 700 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =4.5A; I _B =1.1A | | | 1.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =4.5A; I _B =1.7A | | | 1.1 | V |
| I _{CES} | Collector cut-off current | V _{CE} =rated; V _{BE} =0 T _j =125 | | | 1.0 2.0 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =7.5V; I _C =0 | | | 1.0 | mA |
| h _{FE-1} | DC current gain | I _C =0.1A ; V _{CE} =5V | | 13 | | |
| h _{FE-2} | DC current gain | I _C =4.5A ; V _{CE} =1V | 4.0 | 5.5 | 7.0 | |
| C _C | Collector output capacitance | I _E =0; f=1MHz; V _{CB} =10V | | 80 | | pF |

PACKAGE OUTLINE

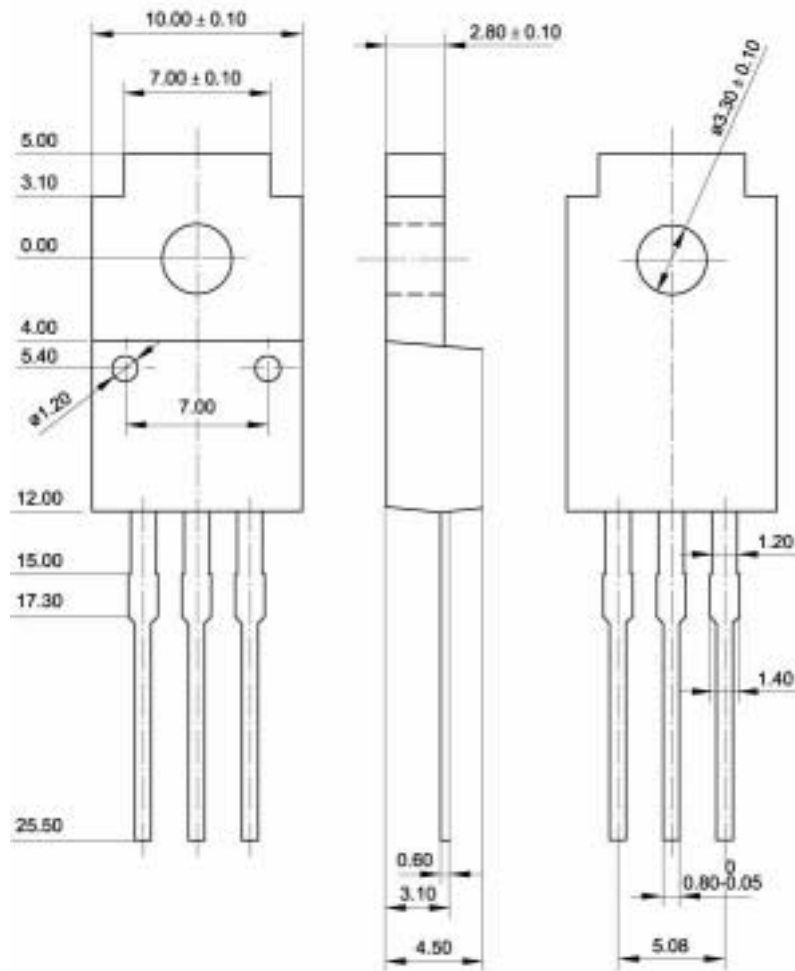


Fig.2 Outline dimensions