

Silicon PNP Power Transistors

2SA1758

DESCRIPTION

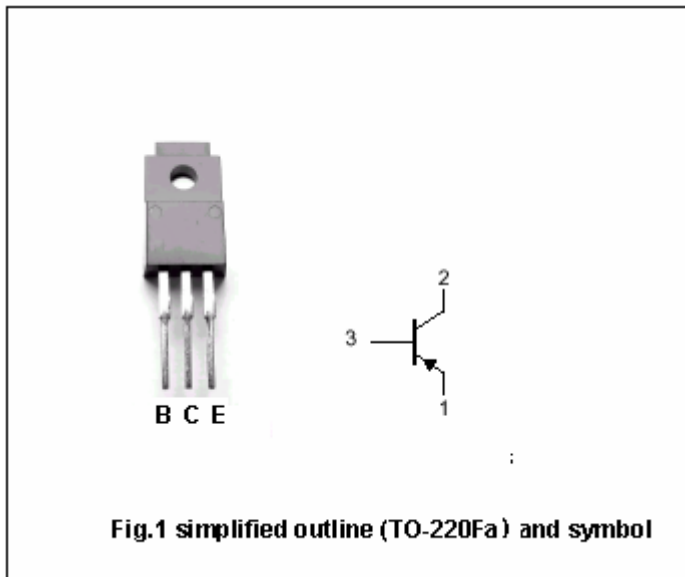
- With TO-220Fa package
- Low collector saturation voltage
- Wide area of safe operation

APPLICATIONS

- For power switching applications

PINNING

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



Absolute maximum ratings(Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|--------------------|---------|------|
| V _{CB0} | Collector-base voltage | Open emitter | -100 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -60 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current | | -12 | A |
| P _C | Collector power 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 =-1mA, I _B =0 | -60 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =-50 μA, I _C =0 | -5 | | | V |
| V _{CEsat-1} | Collector-emitter saturation voltage | I _C =-6A; I _B =-0.3A | | | -0.3 | V |
| V _{CEsat-2} | Collector-emitter saturation voltage | I _C =-8A; I _B =-0.4A | | | -0.5 | V |
| V _{BEsat-1} | Base-emitter saturation voltage | I _C =-6A; I _B =-0.3A | | | -1.2 | V |
| V _{BEsat-2} | Base-emitter saturation voltage | I _C =-8A; I _B =-0.4A | | | -1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-100V; I _E =0 | | | -10 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V; I _C =0 | | | -10 | μA |
| h _{FE} | DC current gain | I _C =-2A; V _{CE} =-2V | 60 | | 320 | |
| f _T | Transition frequency | I _C =-1A; V _{CE} =-10V | | 90 | | MHz |

◆ h_{FE} Classifications

| D | E | F |
|--------|---------|---------|
| 60-120 | 100-200 | 160-320 |

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PACKAGE OUTLINE

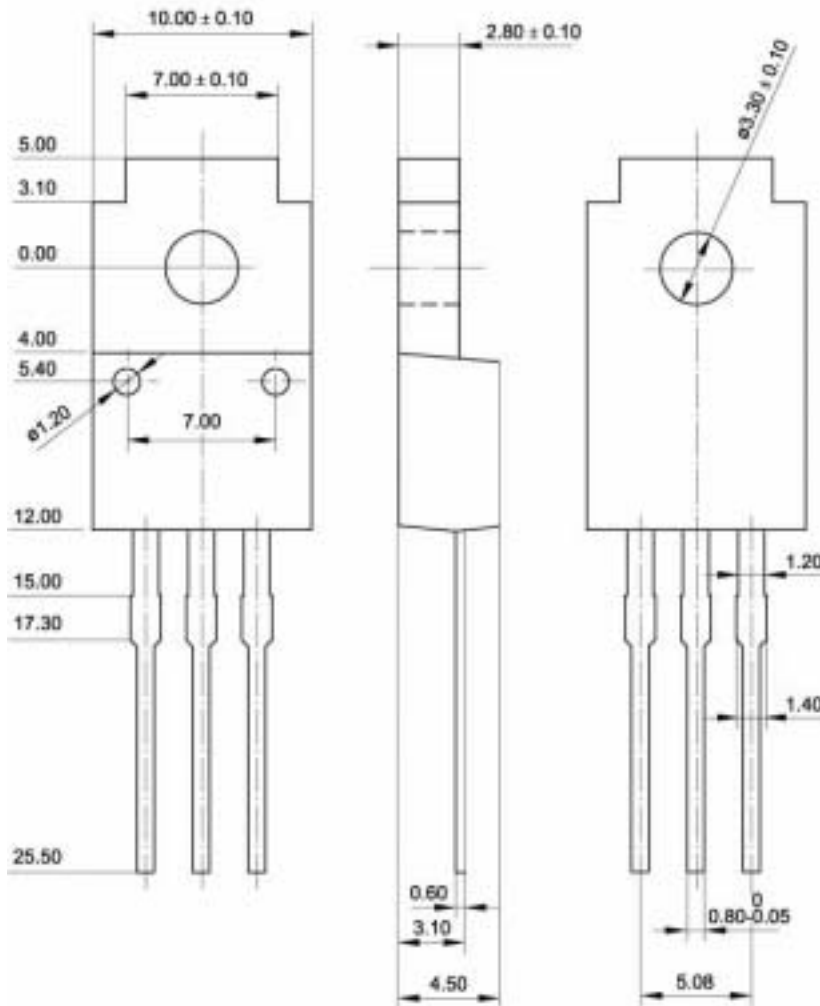


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)