

Silicon PNP Power Transistors

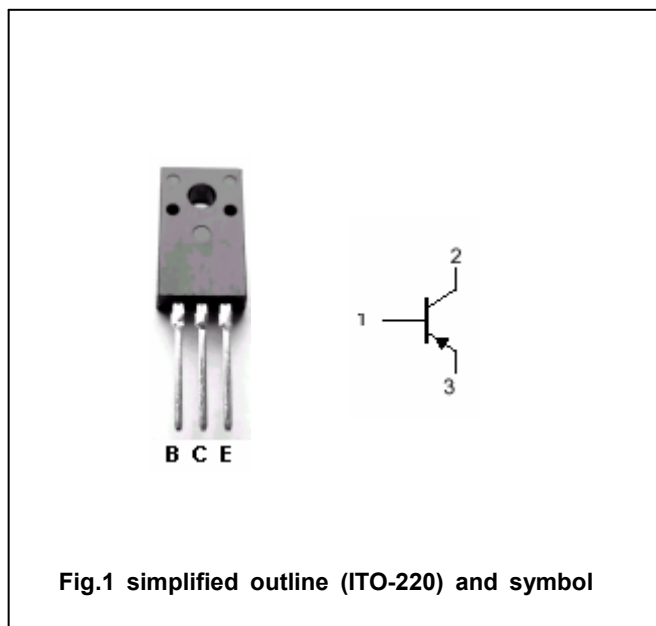
2SA1880

DESCRIPTION

- With ITO-220 package
- Switching power transistor
- Low collector saturation voltage

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 | -80 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -80 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -7 | V |
| I _C | Collector current | | -10 | A |
| I _{CM} | Collector current-Peak | | -20 | A |
| I _B | Base current | | -1.5 | A |
| I _{BM} | Base current-Peak | | -2 | A |
| P _T | Total power dissipation | T _C =25□ | 25 | W |
| T _j | Junction temperature | | 150 | □ |
| T _{stg} | Storage temperature | | -55~150 | □ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|----------------------------------|-----|------|
| R _{th j-c} | Thermal resistance junction case | 5.0 | □/W |

Silicon PNP Power Transistors

2SA1880

CHARACTERISTICS

T_j=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|---|-----|------|------|------|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =-0.1A ; I _B =0 | -80 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-5A; I _B =-0.5A | | | -0.3 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =-5A; I _B =-0.5A | | | -1.2 | V |
| I _{CBO} | Collector cut-off current | At rated volatge | | | -0.1 | mA |
| I _{CEO} | | | | | | |
| I _{EBO} | Emitter cut-off current | At rated volatge | | | -0.1 | mA |
| h _{FE} | DC current gain | I _C =-5A ; V _{CE} =-2V | 70 | | | |
| f _T | Transition frequency | I _C =-1A ; V _{CE} =-10V | | 50 | | MHz |

Switching times

| | | | | | | |
|-----------------|--------------|--|--|--|-----|----|
| t _{on} | Turn-on time | I _C =-5A; I _{B1} =-I _{B2} =-0.5A , R _L =5Ω; V _{BB2} =-4V | | | 0.3 | μs |
| t _s | Storage time | | | | 1.5 | μs |
| t _f | Fall time | | | | 0.2 | μs |

Silicon PNP Power Transistors

2SA1880

PACKAGE OUTLINE

