

Silicon NPN Power Transistors

2SC5802

DESCRIPTION

- With TO-3P(H)IS package
- High voltage;high speed
- Wide area of safe operation

APPLICATIONS

- For high voltage color display horizontal deflection output applications

PINNING

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

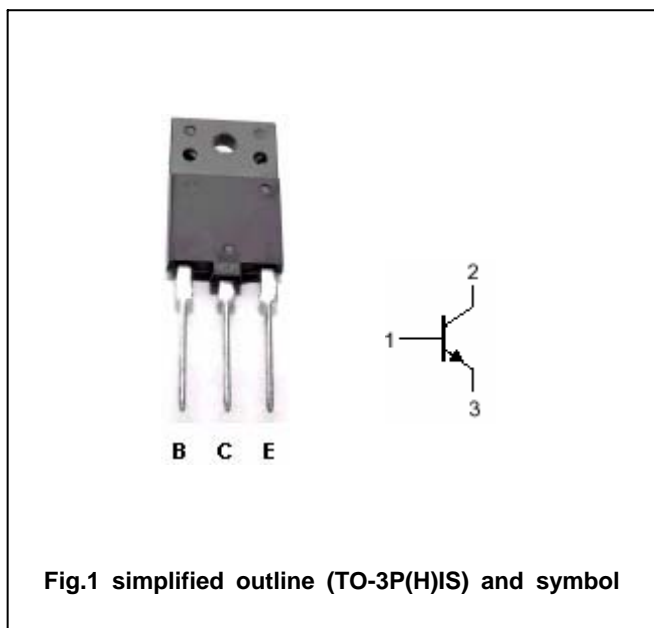


Fig.1 simplified outline (TO-3P(H)IS) and symbol

Absolute maximum ratings($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|---------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 1500 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 800 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 6 | V |
| I_C | Collector current | | 10 | A |
| I_{CM} | Collector current-Peak | | 30 | A |
| P_C | Total power dissipation | $T_C=25$ | 60 | 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 _{CEsat} | Collector-emitter saturation voltage | I _C =6A; I _B =1.5A | | | 3.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =6A; I _B =1.5A | | | 1.5 | V |
| I _{CES} | Collector cut-off current | V _{CE} =1400V; V _{BE} =0 | | | 1.0 | mA |
| I _{CBO} | Collector cut-off current | V _{CB} =800V; I _E =0 | | | 10 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =4V; I _C =0 | | | 1.0 | mA |
| h _{FE-1} | DC current gain | I _C =1A; V _{CE} =5V | 15 | | 48 | |
| h _{FE-2} | DC current gain | I _C =6A; V _{CE} =5V | 7 | | 10 | |
| t _f | Fall time | V _{CC} =200V; I _C =6A; I _{B1} =1.2A I _{B2} =-2.4A; R _L =33.3 | | 0.1 | 0.3 | μs |

