

Silicon NPN Power Transistors

2SD5702

DESCRIPTION

- With TO-3P(H)IS package
- Built-in damper diode
- High voltage ,high speed

APPLICATIONS

- For color display horizontal deflection output applications

PINNING

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

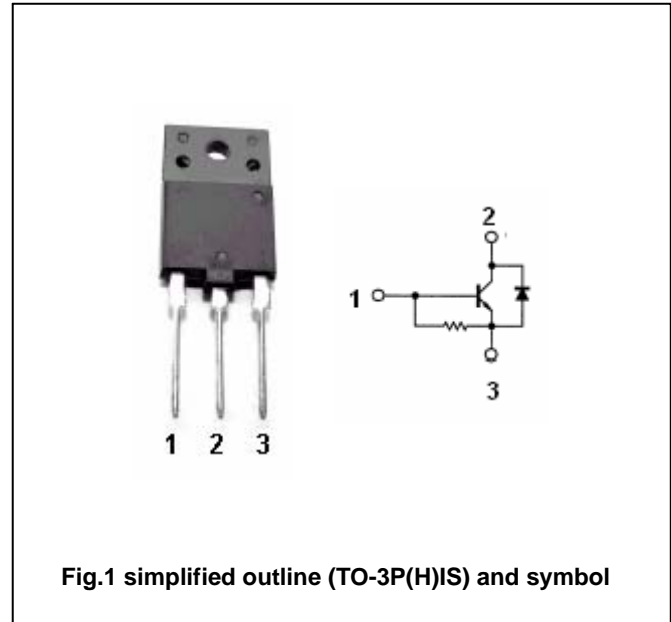


Fig.1 simplified outline (TO-3P(H)IS) and symbol

Absolute maximum ratings (Ta=25)

| 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 | | 6 | A |
| I_{CM} | Collector current-peak | | 16 | A |
| P_C | Collector 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 =4A ; I _B =0.8A | | 2.0 | 5.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =4A ; I _B =0.8A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =800V ; I _E =0 | | | 10 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =4V ; I _C =0 | 40 | | 200 | mA |
| h _{FE-1} | DC current gain | I _C =1A ; V _{CE} =5V | 10 | | 30 | |
| h _{FE-2} | DC current gain | I _C =3A ; V _{CE} =5V | 5 | | 15 | |
| f _T | Transition frequency | I _C =1A ; V _{CE} =10V | | 3 | | MHz |
| V _F | Diode forward voltage | I _F =6A | | | 2.0 | V |
| t _f | Fall time | I _C =4A ; I _{B1} =0.8A ; I _{B2} =-1.6A V _{CC} =200V ; R _L =50 | | | 0.4 | μ s |

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PACKAGE OUTLINE

