

Silicon PNP Power Transistors

2SA1491

DESCRIPTION

- With TO-3PN package
- Complement to type 2SC3855

APPLICATIONS

- Audio and general purpose

PINNING

| PIN | DESCRIPTION |
|-----|--------------------------------------|
| 1 | Base |
| 2 | Collector;connected to mounting base |
| 3 | Emitter |

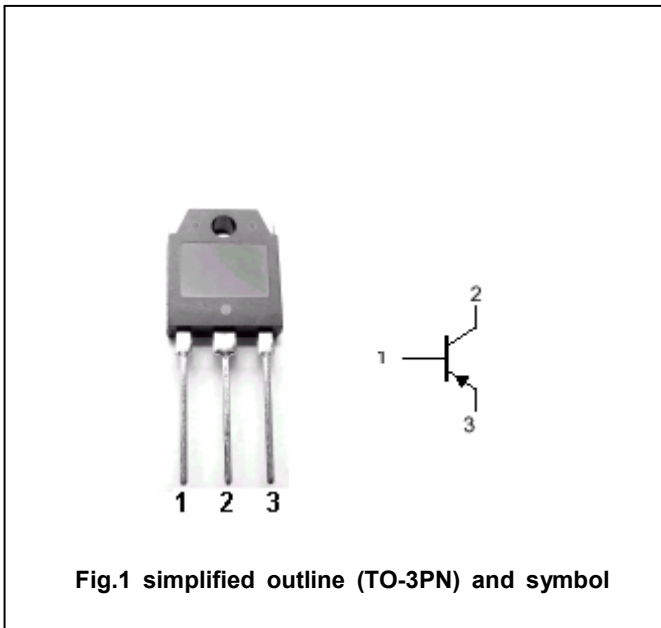


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Ta=□)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | -140 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -140 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -6 | V |
| I _C | Collector current | | -10 | A |
| I _B | Base current | | -4 | A |
| P _C | Collector power dissipation | T _C =25□ | 100 | W |
| T _j | Junction temperature | | 150 | □ |
| T _{stg} | Storage temperature | | -55~150 | □ |

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CHARACTERISTICS

Tj=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|-------------------------|------|------|------|---------|
| $V_{(BR)CEO}$ | Collector-emitter breakdown voltage | $I_C=-50mA; I_B=0$ | -140 | | | V |
| V_{CEsat} | Collector-emitter saturation voltage | $I_C=-5A; I_B=-0.5A$ | | | -2.0 | V |
| I_{CBO} | Collector cut-off current | $V_{CB}=-140V; I_E=0$ | | | -100 | μA |
| I_{EBO} | Emitter cut-off current | $V_{EB}=-6V; I_C=0$ | | | -100 | μA |
| h_{FE} | DC current gain | $I_C=-3A; V_{CE}=-4V$ | 50 | | | |
| f_T | Transition frequency | $I_C=0.5A; V_{CE}=-12V$ | | 20 | | MHz |

Switching times

| | | | | | | |
|----------|--------------|---|--|------|--|---------|
| t_{on} | Turn-on time | $I_C=-5A; R_L=12\Omega$ $I_{B1}=-I_{B2}=-0.5A$ $V_{CC}=60V$ | | 0.30 | | μs |
| t_s | Storage time | | | 0.90 | | μs |
| t_f | Fall time | | | 0.20 | | μs |

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PACKAGE OUTLINE

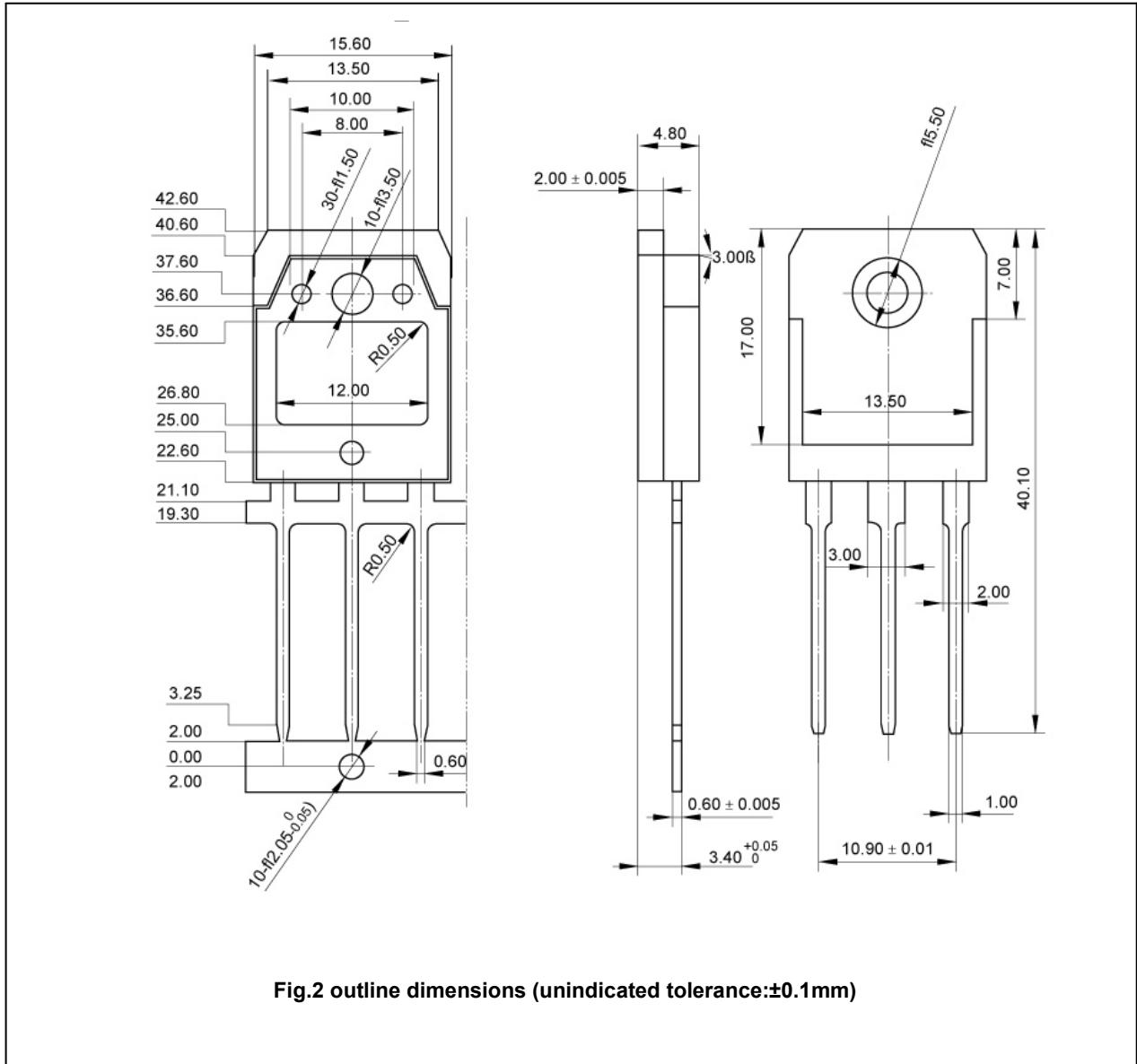


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)

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www.DataSheet4U.com

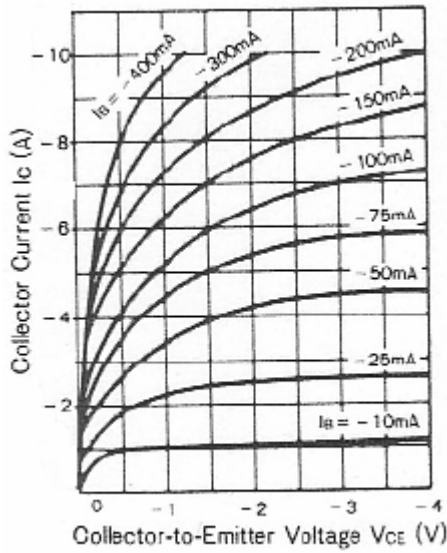


Fig.3 Static Characteristic

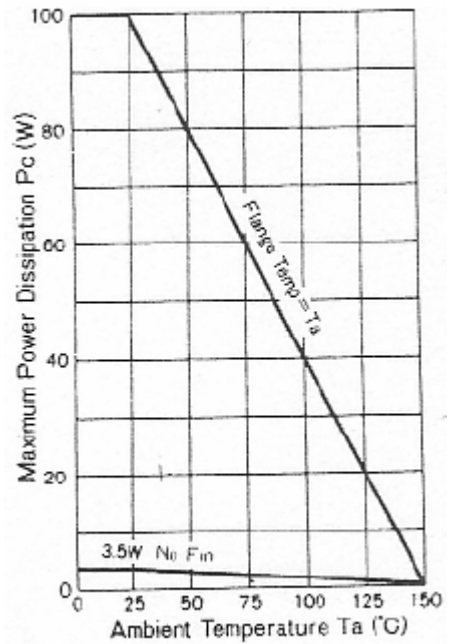


Fig.4 Power Derating

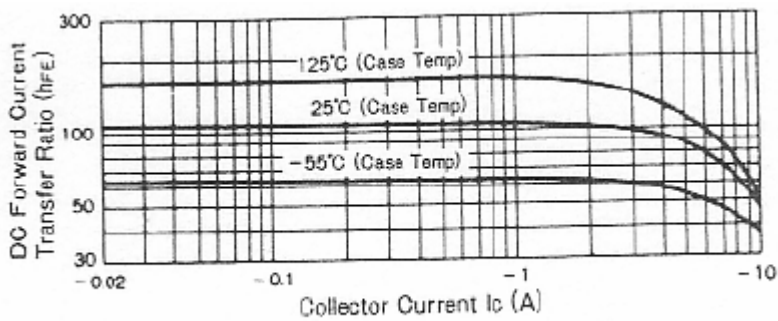


Fig.5 DC current Gain

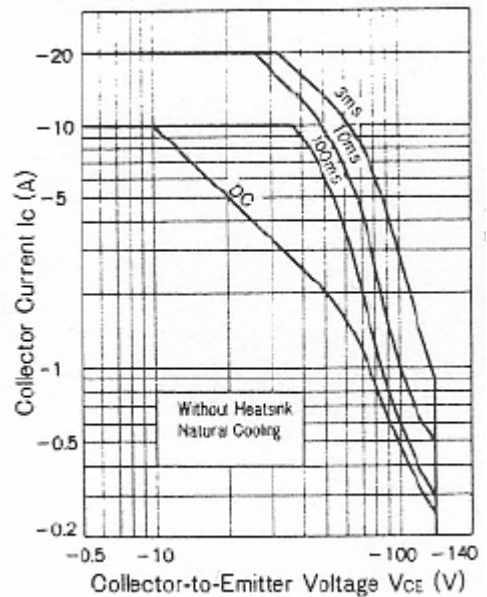


Fig.6 Safe Operating Area