

## Silicon PNP Power Transistors

2SA1672

## DESCRIPTION

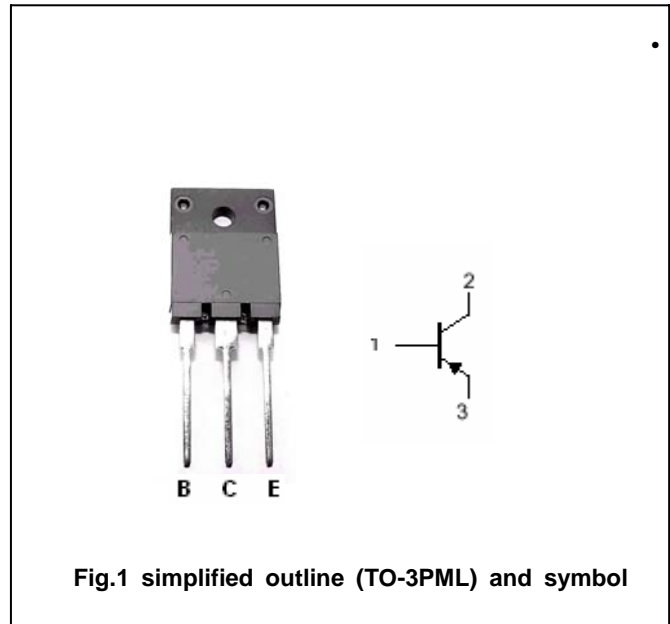
- With TO-3PML package
- Complement to type 2SC4387

## APPLICATIONS

- Audio and general purpose

## PINNING

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

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

| 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 | $T_C=25^\circ\text{C}$ | 80      | W                |
| $T_j$     | Junction temperature        |                        | 150     | $^\circ\text{C}$ |
| $T_{stg}$ | Storage temperature         |                        | -55~150 | $^\circ\text{C}$ |

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

| SYMBOL               | PARAMETER                            | CONDITIONS                                    | MIN  | TYP. | MAX  | UNIT |
|----------------------|--------------------------------------|---|------|------|------|------|
| V <sub>(BR)CEO</sub> | Collector-emitter breakdown voltage  | I <sub>C</sub> =-50mA; I <sub>B</sub> =0      | -140 |      |      | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =-5 A; I <sub>B</sub> =-0.5 A  |      |      | -2.0 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =-140V; I <sub>E</sub> =0     |      |      | -10  | μ A  |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =-6V; I <sub>C</sub> =0       |      |      | -10  | μ A  |
| h <sub>FE</sub>      | DC current gain                      | I <sub>C</sub> =-3A ; V <sub>CE</sub> =-4V    | 50   |      | 180  |      |
| f <sub>T</sub>       | Transition frequency                 | I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-12V |      | 20   |      | MHz  |

## Switching times

|                  |              |  |  |      |  |     |
|------------------|--------------|--|--|------|--|-----|
| t <sub>on</sub>  | Turn-on time | I <sub>C</sub> =-5A; R <sub>L</sub> =12 Ω<br>I <sub>B1</sub> =-I <sub>B2</sub> =-0.5A<br>V <sub>CC</sub> =-60V |  | 0.30 |  | μ s |
| t <sub>stg</sub> | Storage time |  |  | 0.90 |  | μ s |
| t <sub>f</sub>   | Fall time    |  |  | 0.20 |  | μ s |

◆ h<sub>FE</sub> classifications

| O      | P      | Y      |
|--------|--------|--------|
| 50-100 | 70-140 | 90-180 |

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PACKAGE OUTLINE

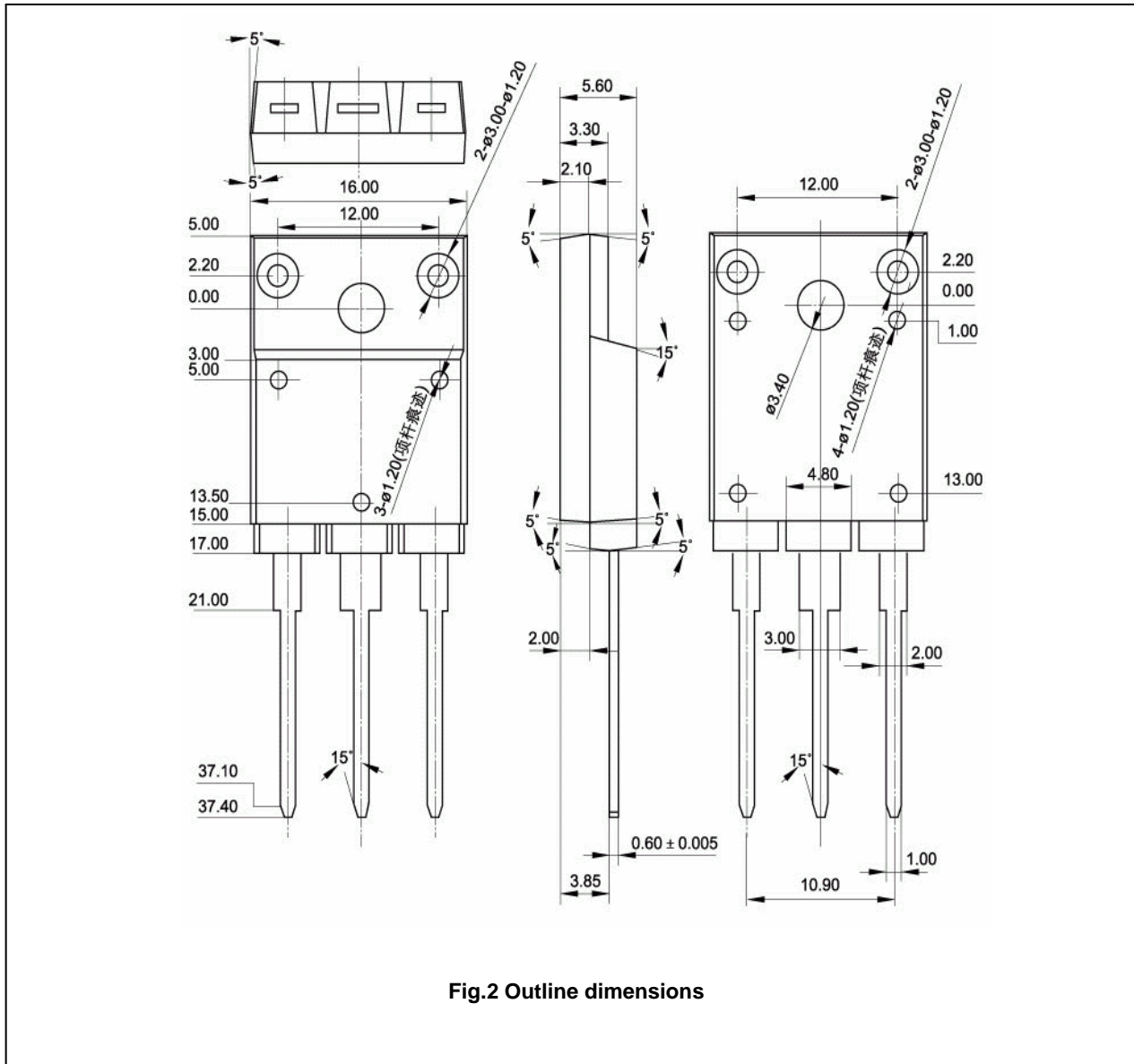


Fig.2 Outline dimensions