

SavantIC Semiconductor

Product Specification

Silicon PNP Power Transistors

2SA1941

DESCRIPTION

- With TO-3P(I) package
- Complement to type 2SC5198

APPLICATIONS

- Power amplifier applications
- Recommend for 70W high fidelity audio frequency amplifier output stage

PINNING

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

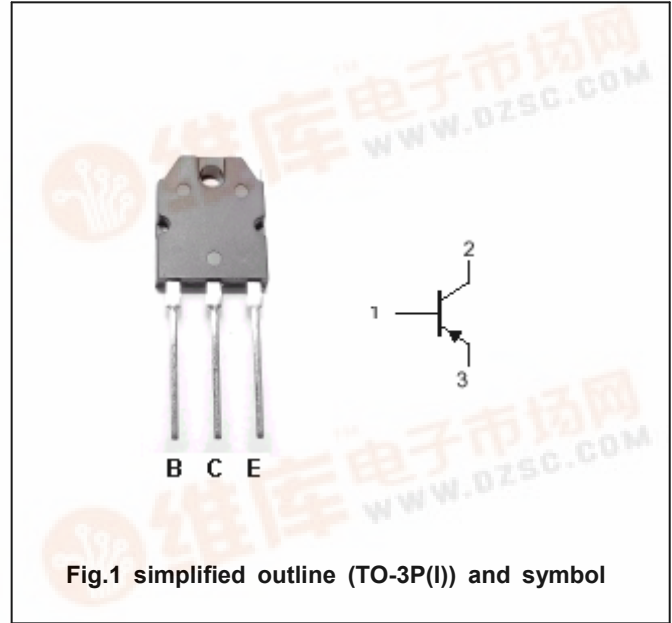


Fig.1 simplified outline (TO-3P(I)) and symbol

Absolute maximum ratings(Tc=25°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 | -5 | V |
| I _C | Collector current | | -10 | A |
| I _B | Base current | | -1 | A |
| P _C | Collector power dissipation | T _C =25°C | 100 | W |
| T _j | Junction temperature | | 150 | °C |
| T _{stg} | Storage temperature | | -55~150 | °C |

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CHARACTERISTICS

T_j=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 =-7 A; I _B =-0.7A | | | -2.0 | V |
| V _{BE} | Base-emitter voltage | I _C =-5A ; V _{CE} =-5V | | | -1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-140V; I _E =0 | | | -5 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V; I _C =0 | | | -5 | μA |
| h _{FE-1} | DC current gain | I _C =-1A ; V _{CE} =-5V | 55 | | 160 | |
| h _{FE-2} | DC current gain | I _C =-5A ; V _{CE} =-5V | 35 | | | |
| f _T | Transition frequency | I _C =-1A ; V _{CE} =-5V | | 30 | | MHz |
| C _{OB} | Output capacitance | I _E =0; V _{CB} =10V; f=1MHz | | 320 | | pF |

◆ h_{FE-1} classifications

| R | O |
|--------|--------|
| 55-110 | 80-160 |

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PACKAGE OUTLINE

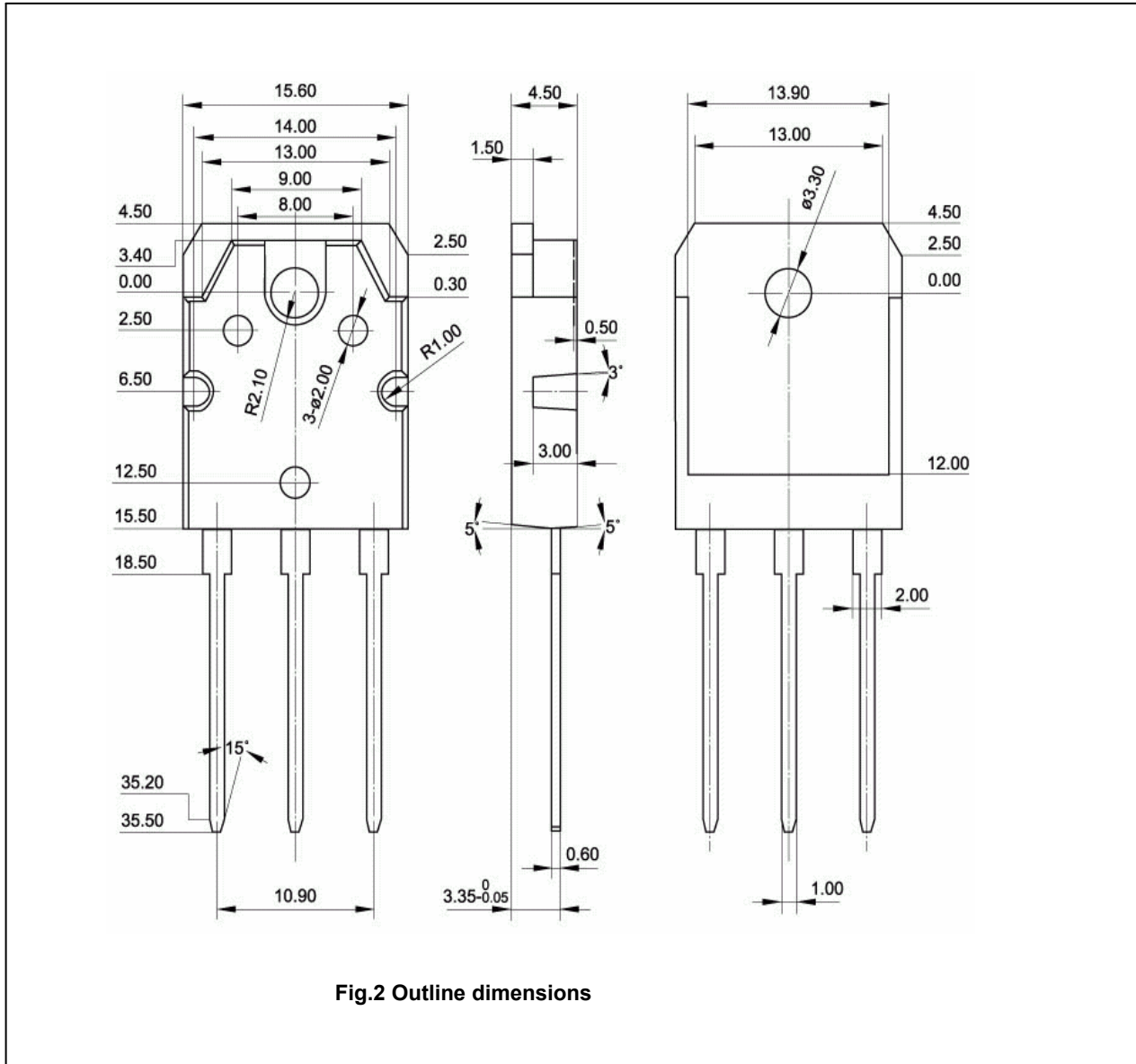


Fig.2 Outline dimensions

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