

Silicon NPN Power Transistors

2SC2902

DESCRIPTION

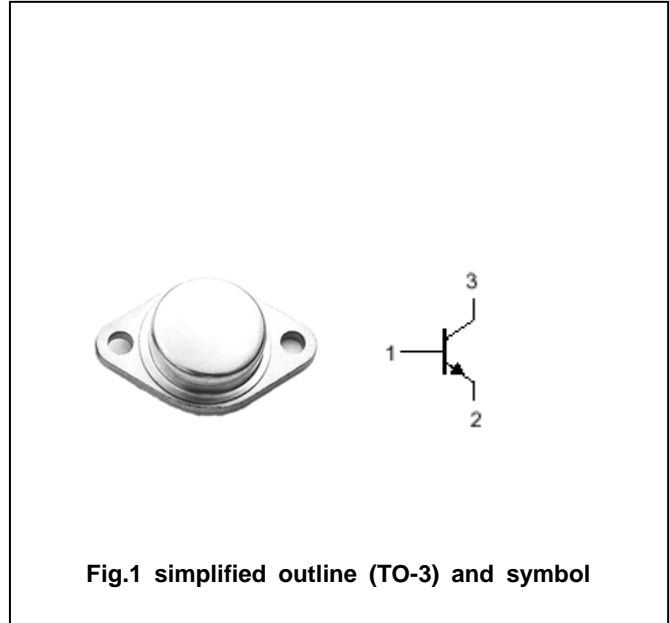
- With TO-3 package
- High voltage ,high speed

APPLICATIONS

- Converters
- Inverters
- Switching regulators
- Motor controls

PINNING (See Fig.2)

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

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|-----------|-----------------------------|--------------------------|---------|--------------------|
| V_{CBO} | Collector-base voltage | Open emitter | 800 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 400 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 9 | V |
| I_C | Collector current | | 15 | A |
| I_{CM} | Collector current-Peak | | 30 | A |
| P_C | Collector power dissipation | $T_C=25^{\circ}\text{C}$ | 150 | W |
| T_j | Junction temperature | | 200 | $^{\circ}\text{C}$ |
| T_{stg} | Storage temperature | | -65~200 | $^{\circ}\text{C}$ |

Silicon NPN Power Transistors

2SC2902

CHARACTERISTICS

T_j=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|--|-----|------|-----|------|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =0.1A ; I _B =0; L=25mH | 400 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA; I _C =0 | 9 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =7.5A; I _B =2.5A | | | 1.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =7.5A; I _B =2.5A | | | 1.5 | V |
| I _{CB0} | Collector cut-off current | V _{CB} =640V; I _E =0 | | | 50 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =9V; I _C =0 | | | 50 | μ A |
| h _{FE} | DC current gain | I _C =7.5A ; V _{CE} =5V | 10 | | 35 | |

PACKAGE OUTLINE

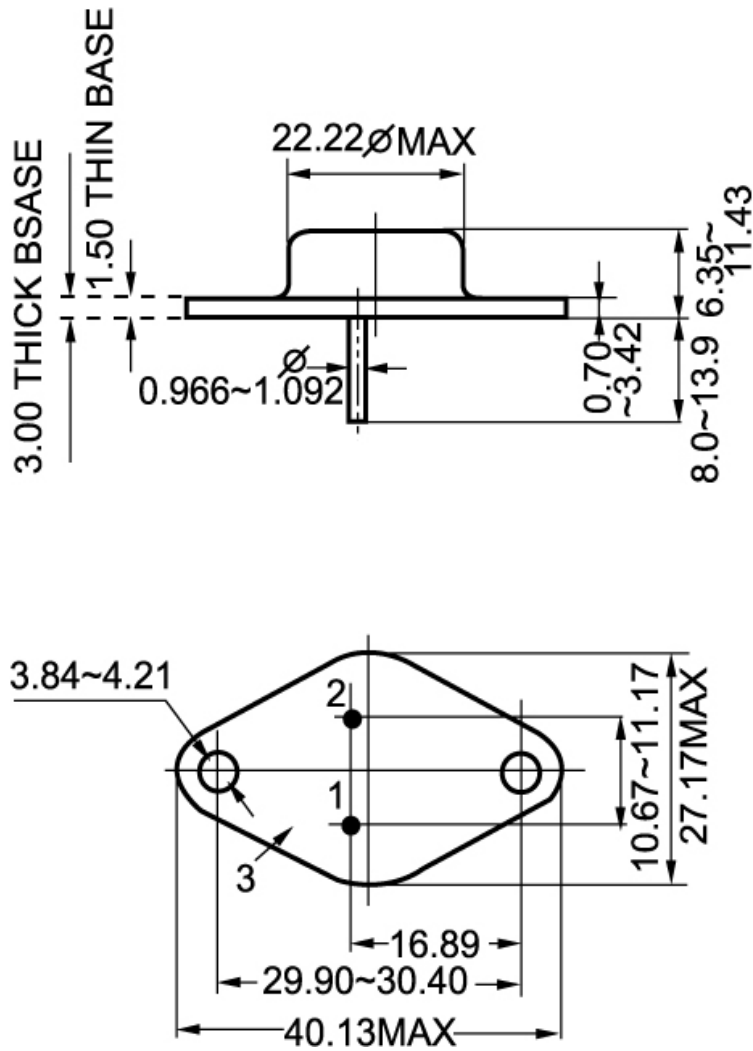


Fig.2 Outline dimensions