

Silicon NPN Power Transistors

2SD905

DESCRIPTION

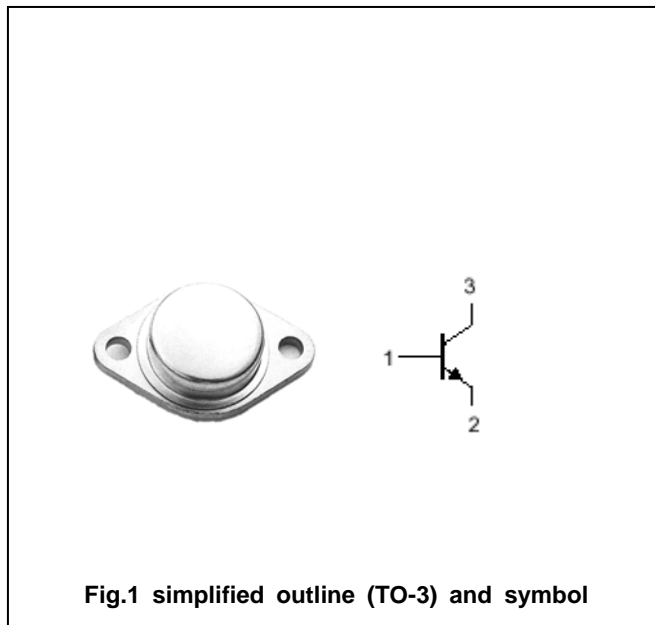
- With TO-3 package
- High voltage ,high speed

APPLICATIONS

- For high voltage power switching TV horizontal deflection output applications

PINNING(see Fig.2)

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

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

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|--------------------------|---------|------------------|
| V_{CBO} | Collector-base voltage | Open emitter | 1400 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 650 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I_C | Collector current | | 8 | A |
| I_{CM} | Collector current-peak | | 10 | A |
| P_C | Collector power dissipation | $T_C = 25^\circ\text{C}$ | 50 | W |
| T_j | Junction temperature | | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage temperature | | -45~150 | $^\circ\text{C}$ |

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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 =10mA ; R _{BE} =∞ | 650 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =10mA ; I _C =0 | 5 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =8A; I _B =1.5A | | | 10 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =8A; I _B =1.5A | | | 1.5 | V |
| I _{CES} | Collector cut-off current | V _{CE} =1400V ; R _{BE} =0 | | | 0.5 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 0.5 | mA |
| h _{FE} | DC current gain | I _C =1A ; V _{CE} =5V | 8 | | 36 | |
| t _f | Fall time | I _C =6.8A; I _{B1} =1.1A; L _B =0 | | | 1.0 | μ s |

PACKAGE OUTLINE

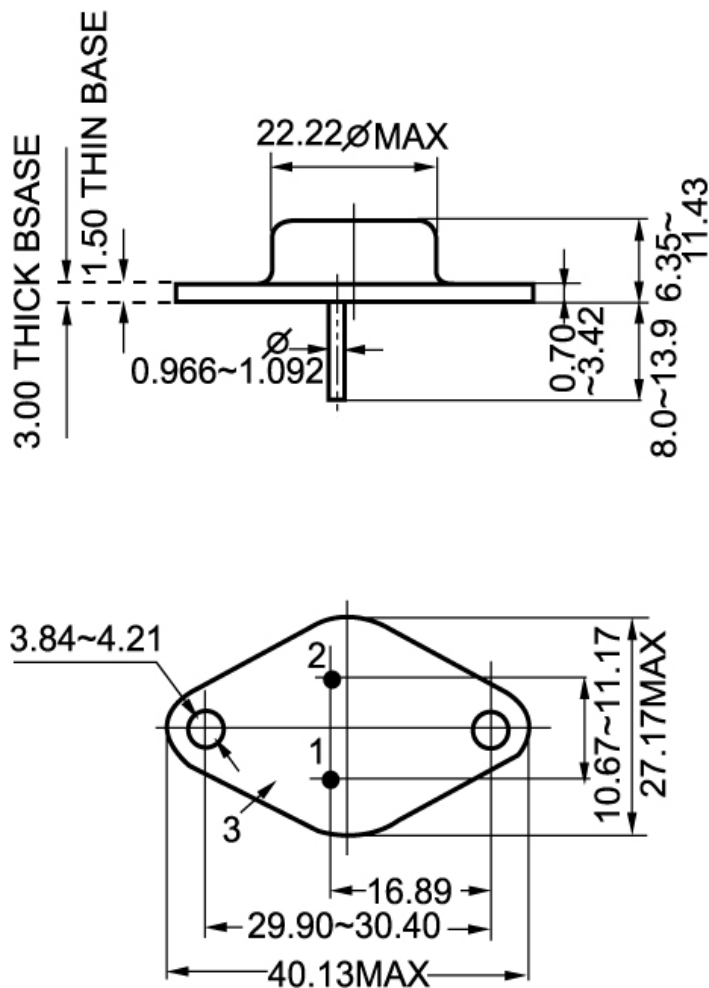


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)