# Silicon NPN Power Transistors 2SC3025

## DESCRIPTION

- With TO-3 package
- High breakdown voltage

## APPLICATIONS

- High voltage power switching character display horizontal deflection output

## PINNING(see Fig.2)

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



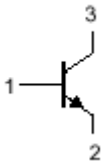



**Fig.1 simplified outline (TO-3) and symbol**

## ABSOLUTE MAXIMUM RATINGS($T_a$=25℃)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|---|---|---|---|---|
| $V_{CBO}$ | Collector-base voltage | Open emitter | 1500 | V |
| $V_{CEO}$ | Collector-emitter voltage | Open base | 800 | V |
| $V_{EBO}$ | Emitter-base voltage | Open collector | 6 | V |
| $I_C$ | Collector current | | 5 | A |
| $I_{CP}$ | Collector current-peak | | 6 | A |
| $P_C$ | Collector power dissipation | $T_C$=25℃ | 50 | W |
| $T_j$ | Junction temperature | | 150 | ℃ |
| $T_{stg}$ | Storage temperature | | -45~150 | ℃ |

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## CHARACTERISTICS

**Tj=25℃ unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-emitter breakdown voltage | $I_C$=10mA ;$R_{BE}$=∞ | 800 | | | V |
| $V_{(BR)EBO}$ | Emitter-base breakdown voltage | $I_E$=10mA; $I_C$=0 | 6 | | | V |
| $V_{CE(sat)}$ | Collector-emitter saturation voltage | $I_C$=5A; $I_B$=1.25A | | | 2.0 | V |
| $V_{BE(sat)}$ | Base-emitter saturation voltage | $I_C$=5A; $I_B$=1.25A | | | 1.5 | V |
| $I_{CES}$ | Collector cut-off current | $V_{CE}$=1500V; $R_{BE}$=∞ | | | 0.5 | mA |
| Switching times | | | | | | |
| $t_s$ | Storage time | $I_C$=5A; $I_{B1}$=1A;$I_{B2}$=-2.5A | | 4.0 | | μs |
| $t_f$ | Fall time | | | | 0.5 | μs |

**PACKAGE OUTLINE**

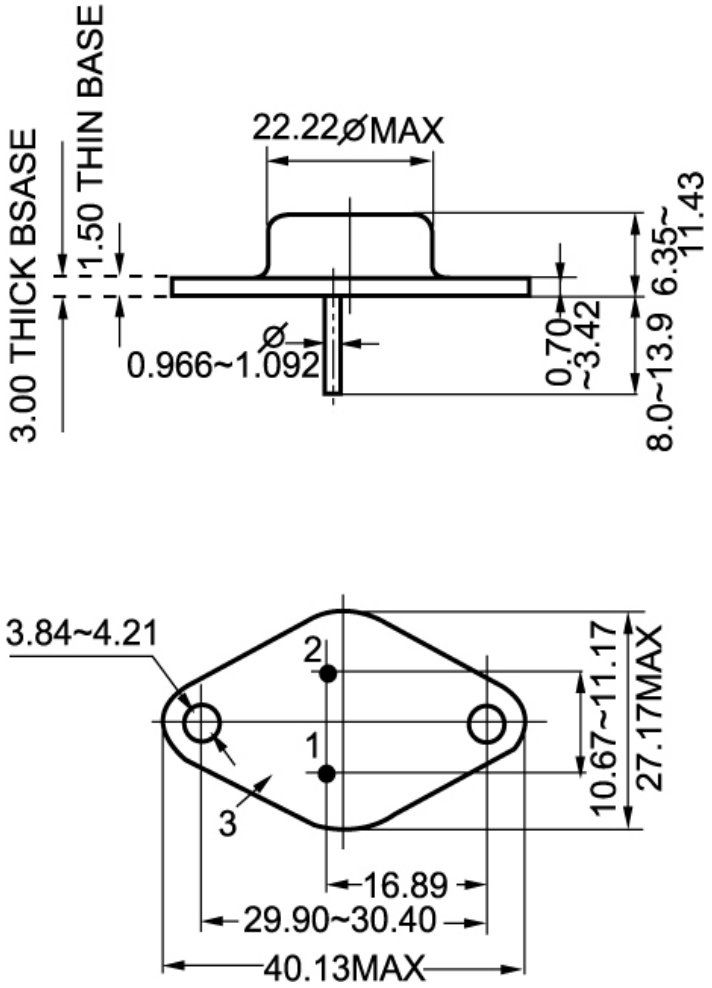



**Fig.2 outline dimensions (unindicated tolerance:±0.1mm)**