# Silicon PNP Power Transistors 2SB1065

## DESCRIPTION

- With TO-126 package
- Complement to type 2SD1506
- Low collector saturation voltage

## APPLICATIONS

- For use in low frequency power amplifier applications

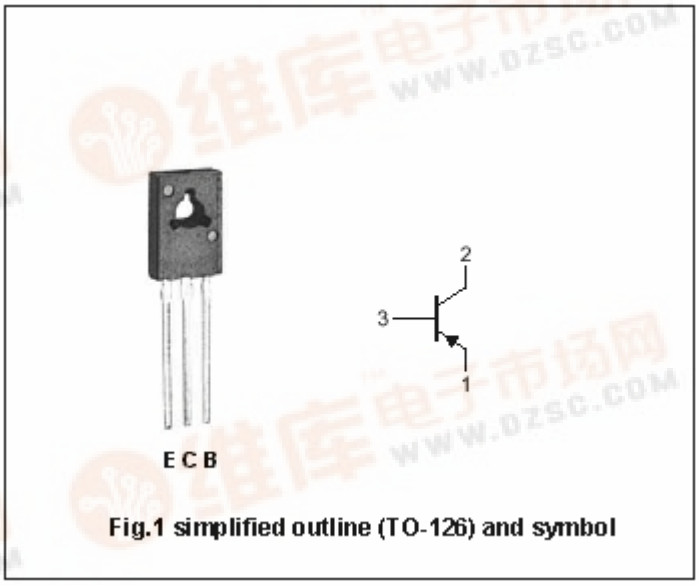

Fig.1 simplified outline (TO-126) and symbol

## PINNING

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

## Absolute maximum ratings(Ta=25℃)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|---|---|---|---|---|
| $V_{CBO}$ | Collector-base voltage | Open emitter | -60 | V |
| $V_{CEO}$ | Collector-emitter voltage | Open base | -50 | V |
| $V_{EBO}$ | Emitter-base voltage | Open collector | -5 | V |
| $I_C$ | Collector current | | -3 | A |
| $I_{CM}$ | Collector current-peak | | -4.5 | A |
| $P_D$ | Total power dissipation | $T_C$=25℃ | 10 | W |
| $T_j$ | Junction temperature | | 150 | ℃ |
| $T_{stg}$ | Storage temperature | | -55~150 | ℃ |

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## CHARACTERISTICS

**Tj=25℃ unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-emitter breakdown voltage | $I_C$=-1mA ,$I_B$=0 | -50 | | | V |
| $V_{(BR)CBO}$ | Collector-base breakdown voltage | $I_C$=-50 μ A ,$I_E$=0 | -60 | | | V |
| $V_{(BR)EBO}$ | Emitter-base breakdown voltage | $I_E$=-50 μ A ,$I_C$=0 | -5 | | | V |
| $V_{CEsat}$ | Collector-emitter saturation voltage | $I_C$=-2A; $I_B$=-0.2A | | | -1.0 | V |
| $V_{BEsat}$ | Base-emitter saturation voltage | $I_C$=-2A; $I_B$=-0.2A | | | -1.5 | V |
| $I_{CBO}$ | Collector cut-off current | $V_{CB}$=-40V; $I_E$=0 | | | -1.0 | μ A |
| $I_{EBO}$ | Emitter cut-off current | $V_{EB}$=-4V; $I_C$=0 | | | -1.0 | μ A |
| $h_{FE}$ | DC current gain | $I_C$=-0.5A ; $V_{CE}$=-3V | 56 | | 390 | |
| $C_{OB}$ | Output capacitance | $I_E$=0 ; $V_{CB}$=-10V,f=1MHz | | 50 | | pF |
| $f_T$ | Transition frequency | $I_C$=-0.5A ; $V_{CE}$=-5V | | 70 | | MHz |



◆ **$h_{FE}$ Classifications**

| N | P | Q | R |
|---|---|---|---|
| 56-120 | 82-180 | 120-270 | 180-390 |

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**PACKAGE OUTLINE**

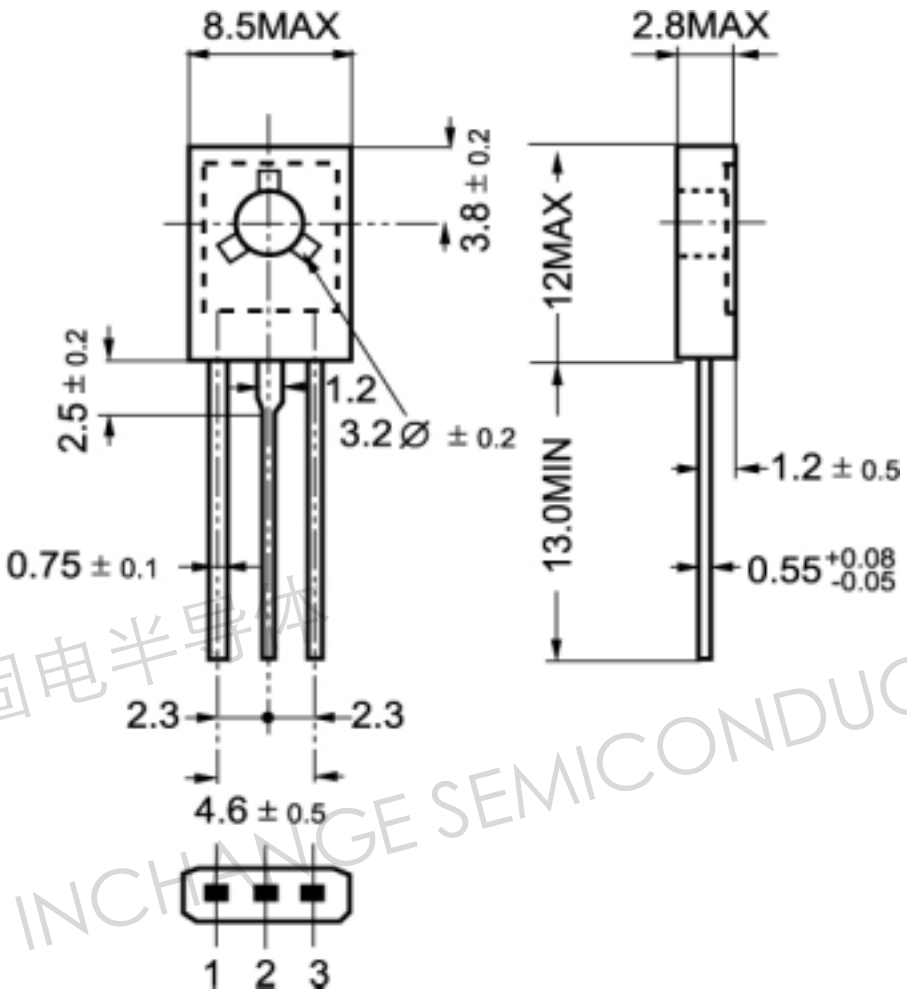




**Fig.2 Outline dimensions**