



## 2SB1126/2SD1626

### For Various Drivers

#### Applications

- Relay drivers, hammer drivers, lamp drivers, motor drivers,

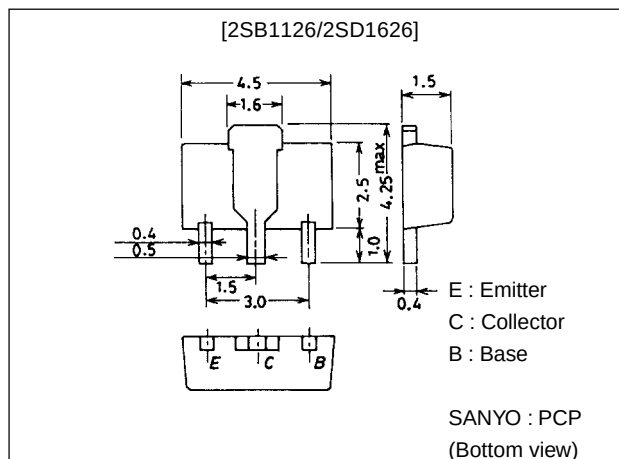
#### Features

- High DC current gain (4000 or greater).
- Large current capacity.
- Very small size making it easy to provide high-density, small-sized hybrid IC's.

#### Package Dimensions

unit:mm

2038



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#### Specifications

##### Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| Parameter                    | Symbol    | Conditions                                           | Ratings     | Unit |
|------------------------------|-----------|------------------------------------------------------|-------------|------|
| Collector-to-Base Voltage    | $V_{CBO}$ |                                                      | (-)80       | V    |
| Collector-to-Emitter Voltage | $V_{CEO}$ |                                                      | (-)50       | V    |
| Emitter-to-Base Voltage      | $V_{EBO}$ |                                                      | (-)10       | V    |
| Collector Current            | $I_C$     |                                                      | (-)1.5      | A    |
| Collector Current (Pulse)    | $I_{CP}$  |                                                      | (-)3        | A    |
| Collector Dissipation        | $P_C$     |                                                      | 500         | mW   |
|                              |           | Mounted on ceramic board (250mm <sup>2</sup> ×0.8mm) | 1.5         | W    |
| Junction Temperature         | $T_J$     |                                                      | 150         | °C   |
| Storage Temperature          | $T_{stg}$ |                                                      | -55 to +150 | °C   |

##### Electrical Characteristics at $T_a = 25^\circ\text{C}$

| Parameter                | Symbol    | Conditions                                 | Ratings |     |        | Unit |
|--------------------------|-----------|--------------------------------------------|---------|-----|--------|------|
|                          |           |                                            | min     | typ | max    |      |
| Collector Cutoff Current | $I_{CBO}$ | $V_{CB}=(-)40\text{V}, I_E=0$              |         |     | (-)100 | nA   |
| Emitter Cutoff Current   | $I_{EBO}$ | $V_{EB}=(-)8\text{V}, I_C=0$               |         |     | (-)100 | nA   |
| DC Current Gain          | $h_{FE1}$ | $V_{CE}=(-)2\text{V}, I_C=(-)500\text{mA}$ | 4000    |     |        |      |
|                          | $h_{FE2}$ | $V_{CE}=(-)2\text{V}, I_C=(-)10\text{mA}$  | 3000    |     |        |      |
| Gain-Bandwidth Product   | $f_T$     | $V_{CE}=(-)10\text{V}, I_C=(-)50\text{mA}$ |         | 120 |        | MHz  |

Marking 2SB1126 : BI  
2SD1626 : DI

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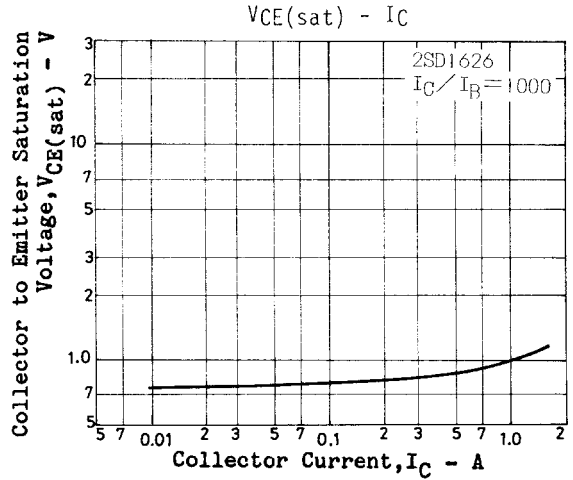
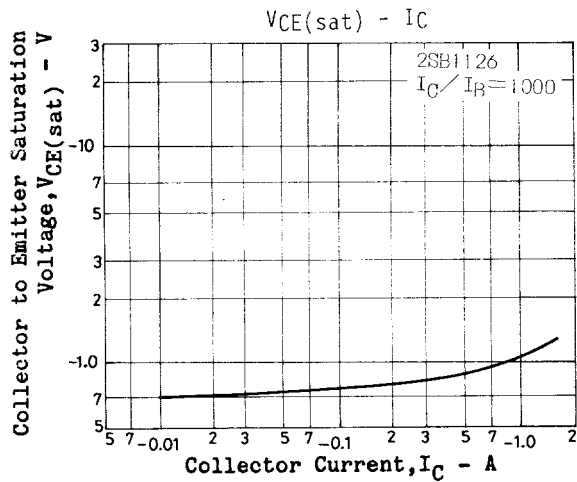
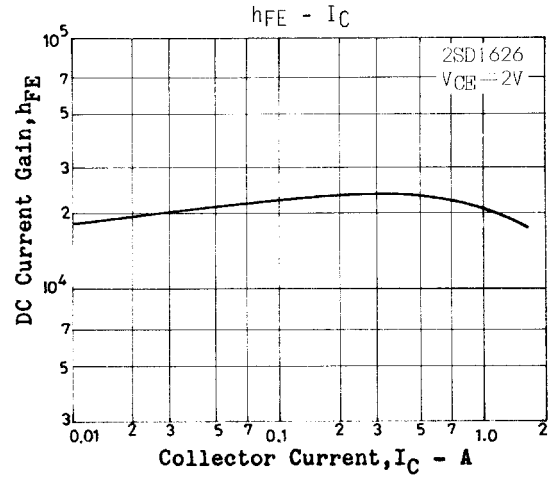
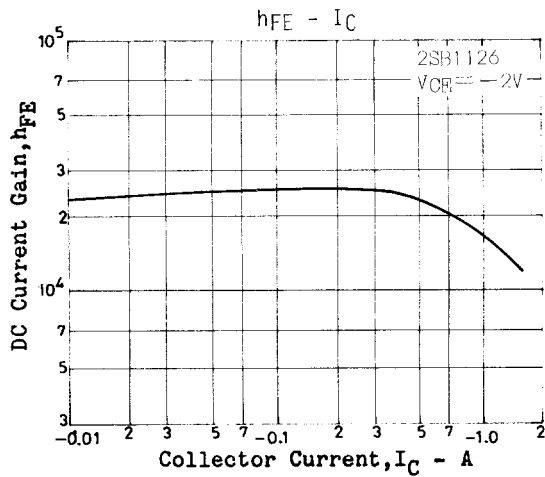
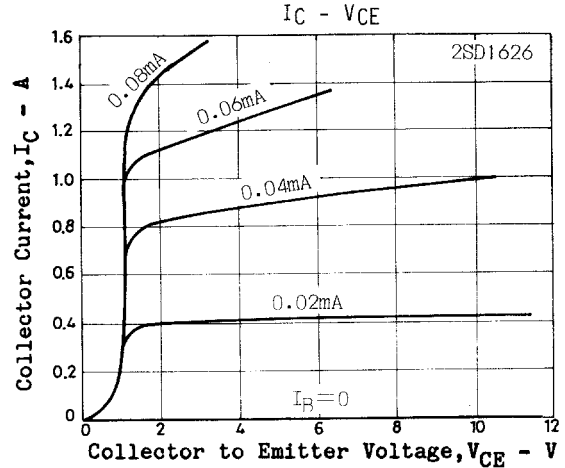
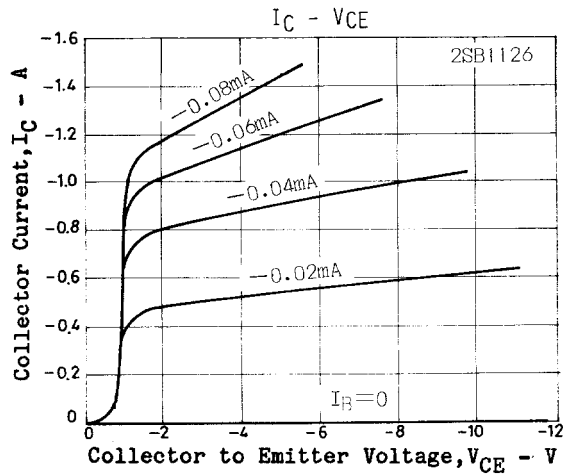
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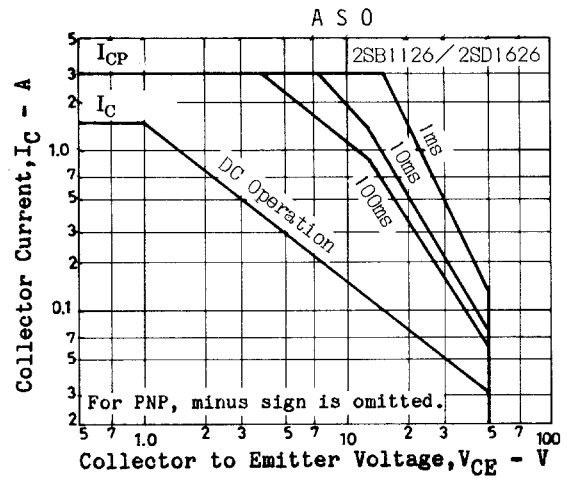
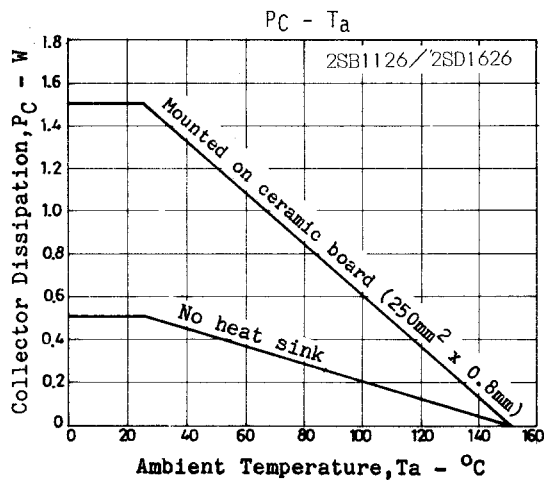
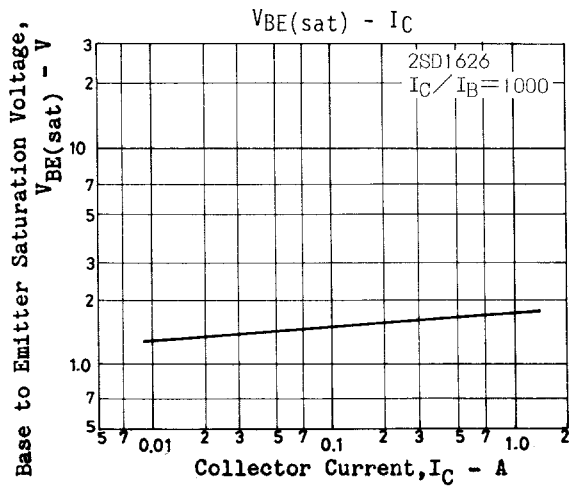
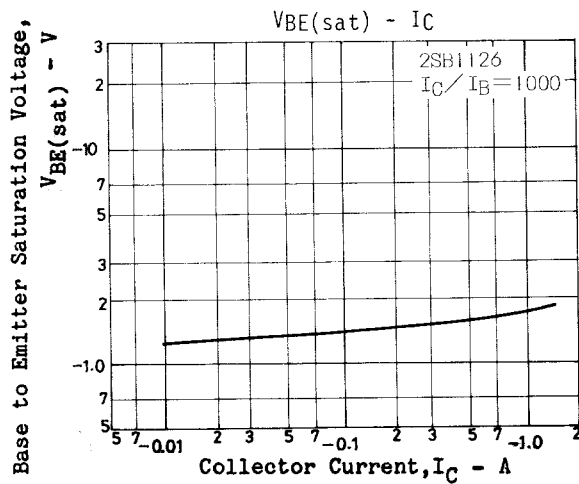
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92098HA (KT)/4107KI/3055MW, TS No.1721-1/3

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| Parameter                               | Symbol        | Conditions                   | Ratings |        |        | Unit |
|-----------------------------------------|---------------|------------------------------|---------|--------|--------|------|
|                                         |               |                              | min     | typ    | max    |      |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=(-)500mA, I_B=(-)0.5mA$ |         | (-)0.9 | (-)1.5 | V    |
| Base-to-Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C=(-)500mA, I_B=(-)0.5mA$ |         | (-)1.5 | (-)2.0 | V    |
| Collector-to-Base Breakdown Voltage     | $V_{(BR)CBO}$ | $I_C=(-)10\mu A, I_E=0$      | (-)80   |        |        | V    |
| Collector-to-Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | $I_C=(-)1mA, R_{BE}=\infty$  | (-)50   |        |        | V    |
| Emitter-to-Base Breakdown Voltage       | $V_{(BR)EBO}$ | $I_E=(-)10\mu A, I_C=0$      | (-)10   |        |        | V    |





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