

# 2SB1462

## Silicon PNP epitaxial planar type

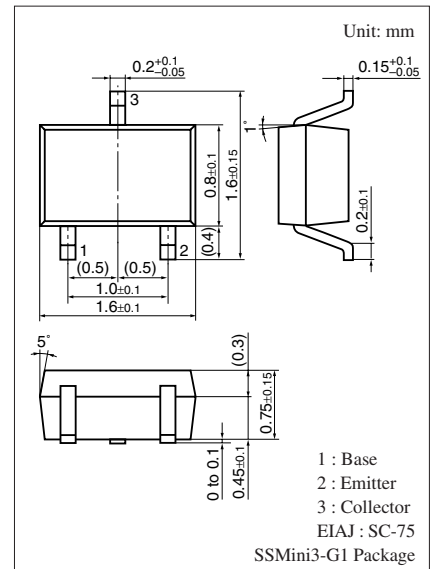
For general amplification  
Complementary to 2SD2216

### ■ Features

- High forward current transfer ratio  $h_{FE}$
- SS-Mini type package allowing downsizing of the equipment and automatic insertion through the tape packing

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

| Parameter                             | Symbol    | Rating      | Unit             |
|---------------------------------------|-----------|-------------|------------------|
| Collector-base voltage (Emitter open) | $V_{CBO}$ | -60         | V                |
| Collector-emitter voltage (Base open) | $V_{CEO}$ | -50         | V                |
| Emitter-base voltage (Collector open) | $V_{EBO}$ | -7          | V                |
| Collector current                     | $I_C$     | -100        | mA               |
| Peak collector current                | $I_{CP}$  | -200        | mA               |
| Collector power dissipation           | $P_C$     | 125         | mW               |
| Junction temperature                  | $T_j$     | 125         | $^\circ\text{C}$ |
| Storage temperature                   | $T_{stg}$ | -55 to +125 | $^\circ\text{C}$ |



Marking Symbol: A

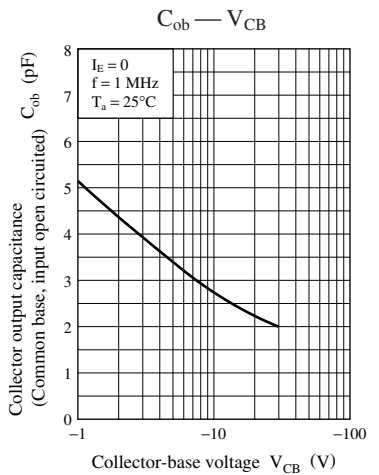
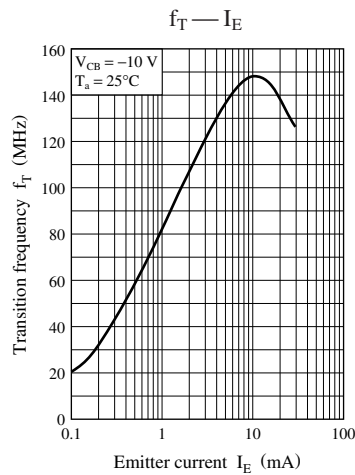
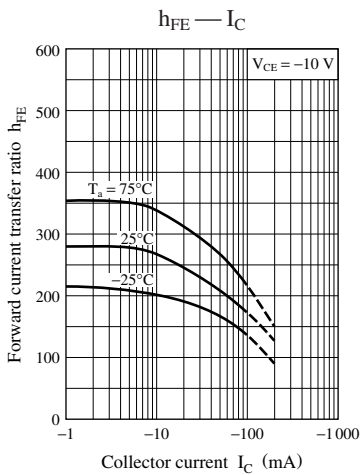
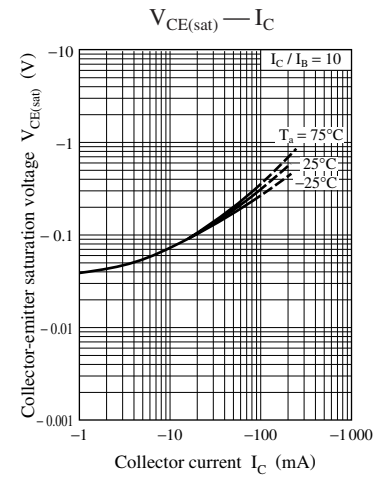
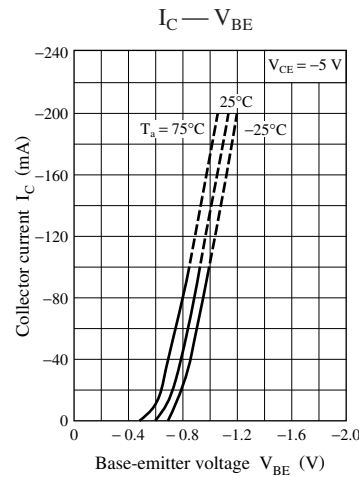
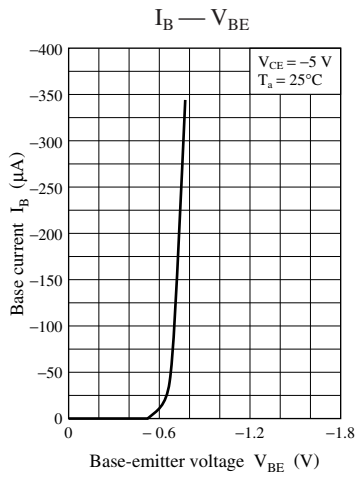
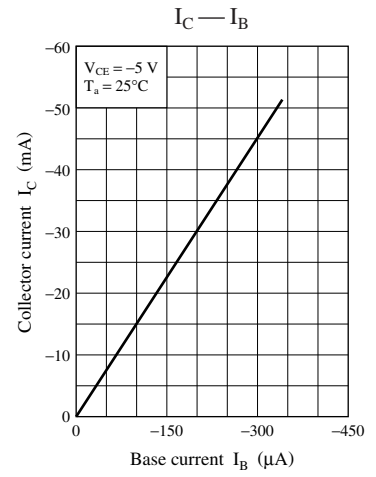
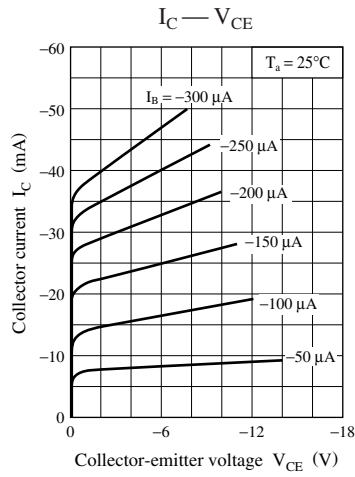
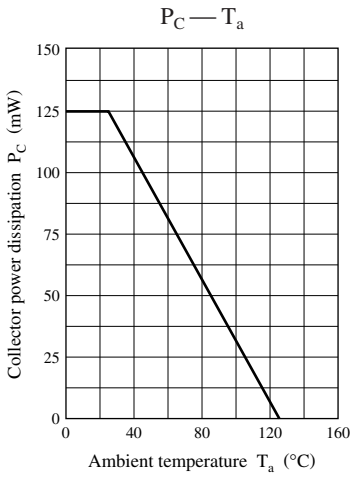
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

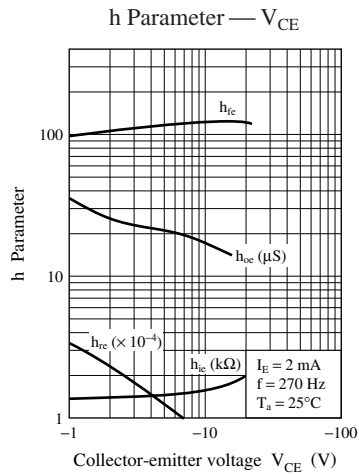
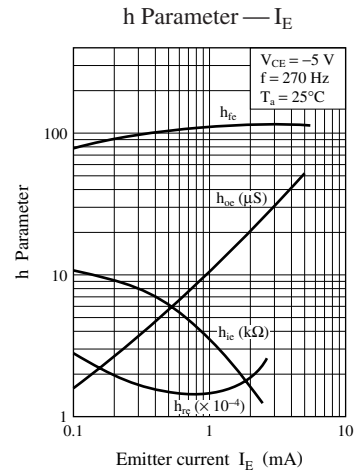
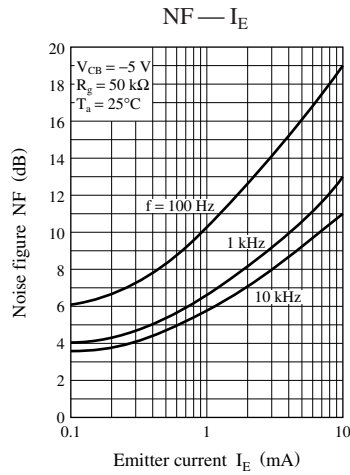
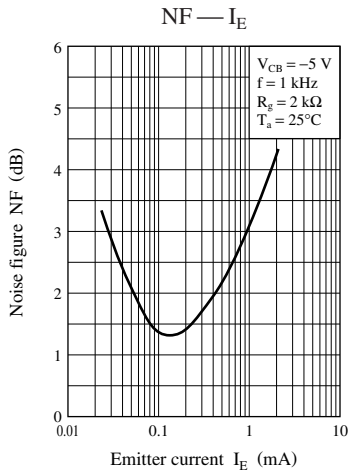
| Parameter   | Symbol        | Conditions   | Min | Typ  | Max  | Unit          |
|---|---------------|--|-----|------|------|---------------|
| Collector-base voltage (Emitter open)                               | $V_{CBO}$     | $I_C = -10 \mu\text{A}, I_E = 0$                               | -60 |      |      | V             |
| Collector-emitter voltage (Base open)                               | $V_{CEO}$     | $I_C = -100 \mu\text{A}, I_B = 0$                              | -50 |      |      | V             |
| Emitter-base voltage (Collector open)                               | $V_{EBO}$     | $I_E = -10 \mu\text{A}, I_C = 0$                               | -7  |      |      | V             |
| Collector-base cutoff current (Emitter open)                        | $I_{CBO}$     | $V_{CB} = -20 \text{V}, I_E = 0$                               |     |      | -0.1 | $\mu\text{A}$ |
| Collector-emitter cutoff current (Base open)                        | $I_{CEO}$     | $V_{CE} = -10 \text{V}, I_B = 0$                               |     |      | -100 | $\mu\text{A}$ |
| Forward current transfer ratio *                                    | $h_{FE}$      | $V_{CE} = -10 \text{V}, I_C = -2 \text{mA}$                    | 160 |      | 460  | —             |
| Collector-emitter saturation voltage                                | $V_{CE(sat)}$ | $I_C = -100 \text{mA}, I_B = -10 \text{mA}$                    |     | -0.3 | -0.5 | V             |
| Transition frequency  | $f_T$         | $V_{CB} = -10 \text{V}, I_E = 1 \text{mA}, f = 200 \text{MHz}$ |     | 80   |      | MHz           |
| Collector output capacitance<br>(Common base, input open circuited) | $C_{ob}$      | $V_{CB} = -10 \text{V}, I_E = 0, f = 1 \text{MHz}$             |     | 2.7  |      | pF            |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. \*: Rank classification

| Rank     | Q          | R          | S          | No Rank    |
|----------|------------|------------|------------|------------|
| $h_{FE}$ | 160 to 260 | 210 to 340 | 290 to 460 | 160 to 460 |





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