

# 2SB1722J

## Silicon PNP epitaxial planar type

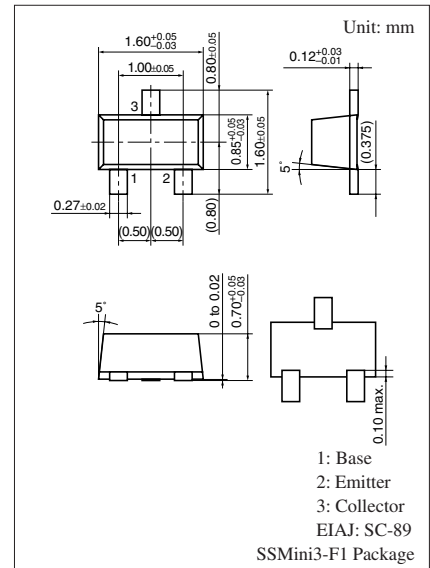
For high breakdown voltage low-frequency amplification

### ■ Features

- High collector-emitter voltage (Base open)  $V_{CEO}$
- 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) | $V_{CBO}$ | -100        | V                |
| Collector-emitter voltage (Base open) | $V_{CEO}$ | -100        | V                |
| Emitter-base voltage (Collector open) | $V_{EBO}$ | -5          | V                |
| Collector current                     | $I_C$     | -20         | mA               |
| Peak collector current                | $I_{CP}$  | -50         | mA               |
| Collector power dissipation           | $P_C$     | 125         | mW               |
| Junction temperature                  | $T_j$     | 125         | $^\circ\text{C}$ |
| Storage temperature                   | $T_{stg}$ | -55 to +125 | $^\circ\text{C}$ |

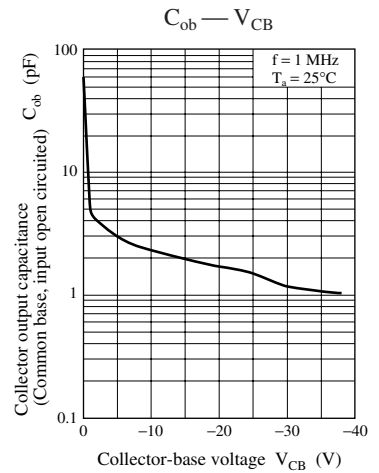
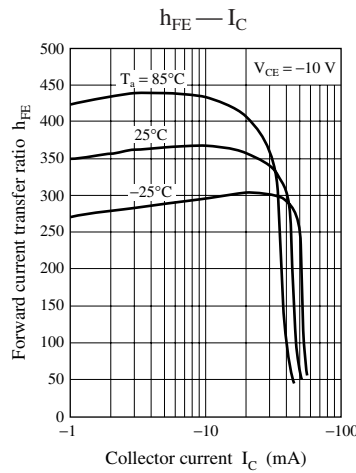
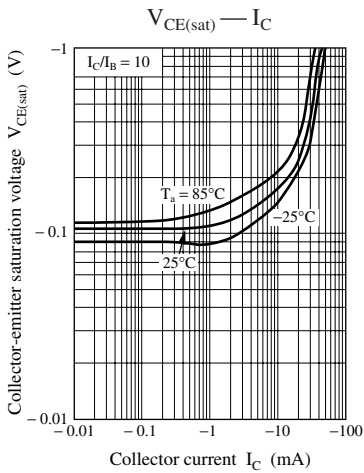
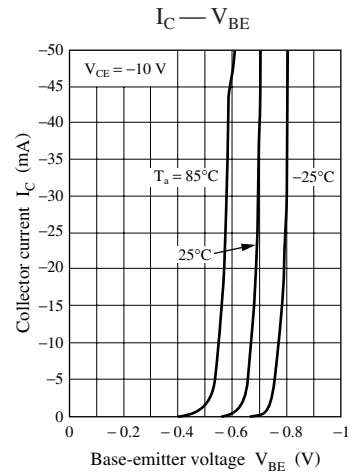
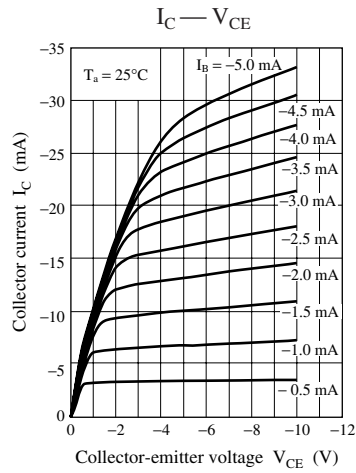
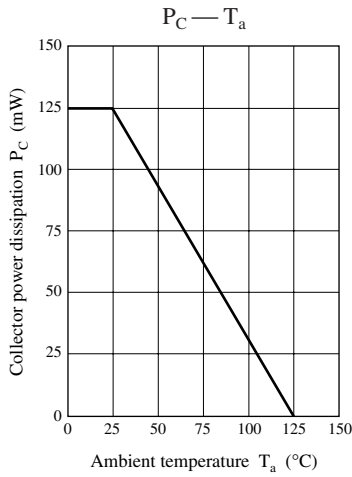


Marking Symbol: 4R

### ■ 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)         | $V_{CBO}$     | $I_C = -10 \mu\text{A}$ , $I_E = 0$                                    | -100 |     |      | V             |
| Collector-emitter voltage (Base open)         | $V_{CEO}$     | $I_C = -1 \text{ mA}$ , $I_B = 0$                                      | -100 |     |      | V             |
| Emitter-base voltage (Collector open)         | $V_{EBO}$     | $I_E = -10 \mu\text{A}$ , $I_C = 0$                                    | -5   |     |      | V             |
| Collector-base cutoff current (Emitter open)  | $I_{CBO}$     | $V_{CB} = -50 \text{ V}$ , $I_E = 0$                                   |      |     | -100 | nA            |
| Collector-emitter cut-off current (Base open) | $I_{CEO}$     | $V_{CE} = -50 \text{ V}$ , $I_B = 0$                                   |      |     | -1   | $\mu\text{A}$ |
| Forward current transfer ratio                | $h_{FE}$      | $V_{CE} = -10 \text{ V}$ , $I_C = -2 \text{ mA}$                       | 200  |     | 700  | —             |
| Collector-emitter saturation voltage          | $V_{CE(sat)}$ | $I_C = -10 \text{ mA}$ , $I_B = -1 \text{ mA}$                         |      |     | -0.3 | V             |
| Transition frequency                          | $f_T$         | $V_{CB} = -5 \text{ V}$ , $I_E = 2 \text{ mA}$ , $f = 200 \text{ MHz}$ |      | 200 |      | MHz           |

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



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