

# 2SD2620G

## Silicon NPN epitaxial planar type

For low-frequency driver amplification

#### ■ Features

- High forward current transfer ratio hFE
- ullet Low collector-emitter saturation voltage  $V_{CE(sat)}$
- ullet High emitter-base voltage (Collector open)  $V_{EBO}$

### ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter                             | Symbol           | Rating      | Unit |  |
|---------------------------------------|------------------|-------------|------|--|
| Collector-base voltage (Emitter open) | V <sub>CBO</sub> | 100         | V    |  |
| Collector-emitter voltage (Base open) | $V_{CEO}$        | 100         | V    |  |
| Emitter-base voltage (Collector open) | $V_{EBO}$        | 15          | V    |  |
| Collector current                     | $I_{C}$          | 20          | mA   |  |
| Peak collector current                | $I_{CP}$         | 50          | mA   |  |
| Collector power dissipation           | $P_{C}$          | 125         | mW   |  |
| Junction temperature                  | T <sub>j</sub>   | 125         | °C   |  |
| Storage temperature                   | T <sub>stg</sub> | -55 to +125 | °C   |  |

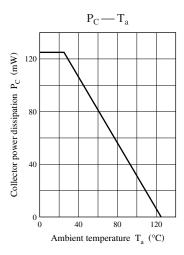
#### Package

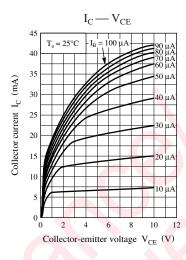
- Code
  - SSMini3-F3
- Marking Symbol: 3B
- Pin Name
  - 1: Base
  - 2: Emitter
- 3: Collector

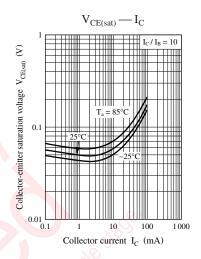
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

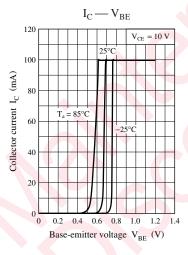
| Parameter                                    | Symbol               | Conditions  | Min  | Тур   | Max   | Unit |
|--|----------------------|---|------|-------|-------|------|
| Collector-base voltage (Emitter open)        | $V_{CBO}$            | $I_C = 10 \mu\text{A}, I_E = 0$   | 100  | io ic | 9     | V    |
| Collector-emitter voltage (Base open)        | V <sub>CEO</sub>     | $I_C = 1 \text{ mA}, I_B = 0$   | 100  | 0///  |       | V    |
| Emitter-base voltage (Collector open)        | $V_{EBO}$            | $I_E = 10 \mu\text{A},  I_C = 0$  | 15   | 59    |       | V    |
| Collector-base cutoff current (Emitter open) | $I_{CBO}$            | $V_{CB} = 60 \text{ V}, I_{E} = 0$                                      | 0,0, |       | 0.1   | μΑ   |
| Collector-emitter cutoff current (Base open) | $I_{CEO}$            | $V_{CE} = 60 \text{ V}, I_{B} = 0$                                      |      |       | 1.0   | μΑ   |
| Forward current transfer ratio               | $h_{FE}$             | $V_{CE} = 10 \text{ V}, I_{C} = 2 \text{ mA}$                           | 400  |       | 1 200 | _    |
| Collector-emitter saturation voltage         | V <sub>CE(sat)</sub> | $I_C = 10 \text{ mA}, I_B = 1 \text{ mA}$                               |      | 0.05  | 0.20  | V    |
| Transition frequency                         | $f_T$                | $f_T$ $V_{CB} = 10 \text{ V}, I_E = -2 \text{ mA}, f = 200 \text{ MHz}$ |      | 200   |       | MHz  |
| Noise voltage                                | NV                   | $V_{CE} = 10 \text{ V}, I_{C} = 1 \text{ mA}, G_{V} = 80 \text{ dB}$    |      | 80    |       | mV   |
|  |                      | $R_g = 100 \text{ k}\Omega$ , Function = FLAT                           |      |       |       |      |

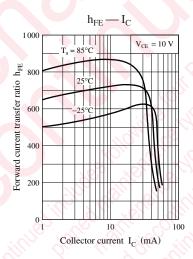
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

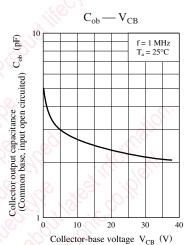




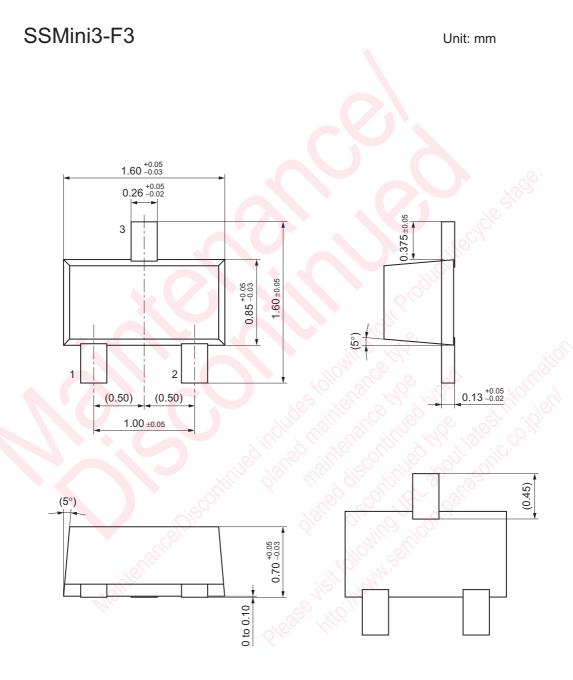








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