

# XN0F261

## Silicon NPN epitaxial planar type

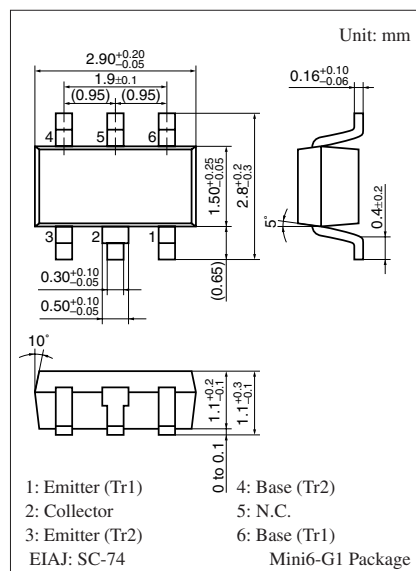
For muting

### ■ Features

- Two elements incorporated into one package  
(Collector-coupled transistors with built-in resistor)
- Reduction of the mounting area and assembly cost by one half

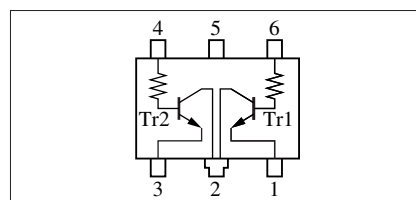
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter                             | Symbol    | Rating      | Unit             |
|---------------------------------------|-----------|-------------|------------------|
| Collector-base voltage (Emitter open) | $V_{CBO}$ | 30          | V                |
| Collector-emitter voltage (Base open) | $V_{CEO}$ | 20          | V                |
| Emitter-base voltage (Collector open) | $V_{EBO}$ | 5           | V                |
| Collector current                     | $I_C$     | 600         | mA               |
| Total power dissipation               | $P_T$     | 300         | mW               |
| Junction temperature                  | $T_j$     | 150         | $^\circ\text{C}$ |
| Storage temperature                   | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |



Marking Symbol: 6B

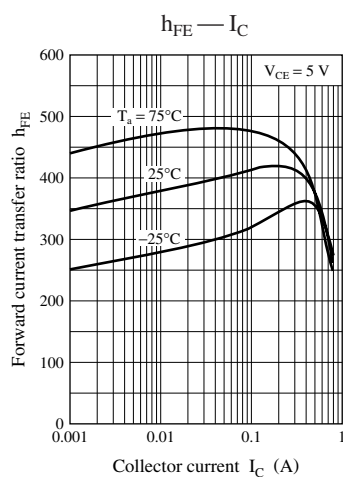
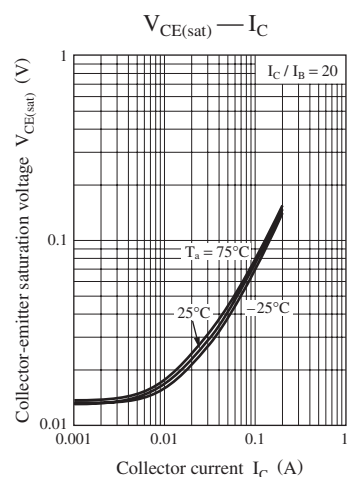
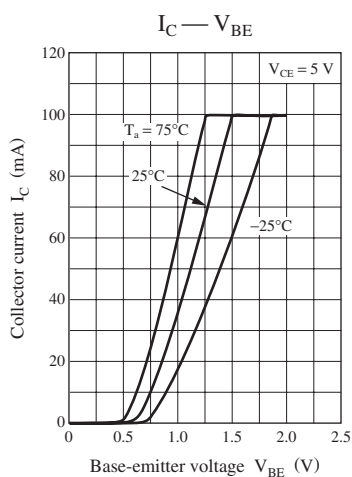
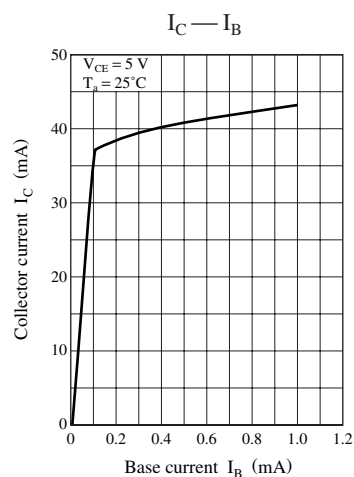
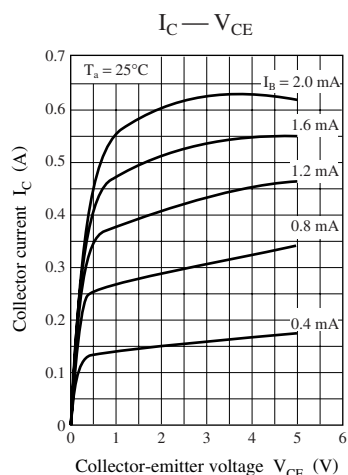
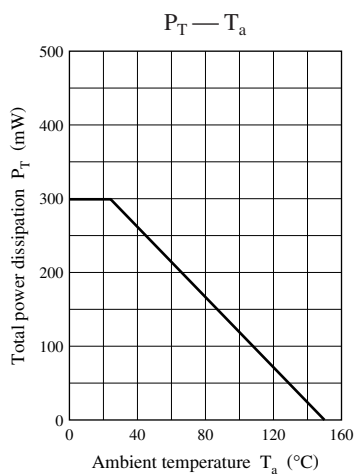
Internal Connection



### ■ 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)        | $V_{CBO}$     | $I_C = 1\ \mu\text{A}$ , $I_E = 0$                                       | 30   |     |      | V             |
| Collector-emitter voltage (Base open)        | $V_{CEO}$     | $I_C = 1\ \text{mA}$ , $I_B = 0$                                         | 20   |     |      | V             |
| Emitter-base voltage (Collector open)        | $V_{EBO}$     | $I_E = 1\ \mu\text{A}$ , $I_C = 0$                                       | 5    |     |      | V             |
| Collector-base cutoff current (Emitter open) | $I_{CBO}$     | $V_{CB} = 30\ \text{V}$ , $I_E = 0$                                      |      |     | 1    | $\mu\text{A}$ |
| Emitter-base cutoff current (Collector open) | $I_{EBO}$     | $V_{EB} = 5\ \text{V}$ , $I_C = 0$                                       |      |     | 1    | $\mu\text{A}$ |
| Forward current transfer ratio               | $h_{FE}$      | $V_{CE} = 5\ \text{V}$ , $I_C = 50\ \text{mA}$                           | 100  |     | 600  | —             |
| Collector-emitter saturation voltage         | $V_{CE(sat)}$ | $I_C = 50\ \text{mA}$ , $I_B = 2.5\ \text{mA}$                           |      |     | 80   | mV            |
| Input resistance                             | $R_i$         |                                                                          | -30% | 3.3 | +30% | k $\Omega$    |
| Transition frequency                         | $f_T$         | $V_{CB} = 10\ \text{V}$ , $I_E = -50\ \text{mA}$ , $f = 200\ \text{MHz}$ |      | 200 |      | MHz           |

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



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