# imall

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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# XN0F256

### Silicon NPN epitaxial planar type

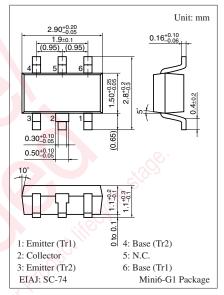
### For muting

#### Features

- Two elements incorporated into one package (Collector-coupled transistors with built-in resistor)
- $\bullet$  Low collector-emitter saturation voltage  $V_{CE(sat)}$
- Reduction of the mounting area and assembly cost by one half

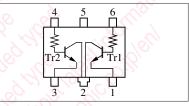
#### Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	30	V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	20	V
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	600	mA
Total power dissipation	P <sub>T</sub>	300	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C



#### Marking Symbol: 6A

#### Internal Connection



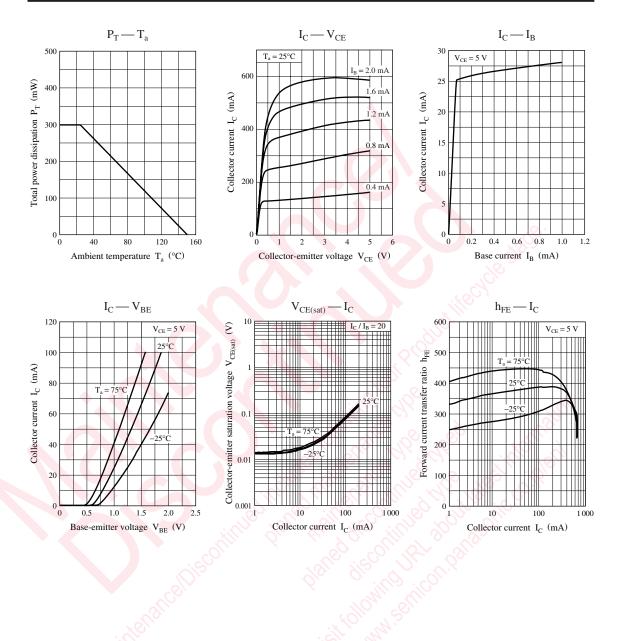
#### Conditions Parameter Symbol Min Тур Max Unit 30 v Collector-base voltage (Emitter open) V<sub>CBO</sub> $I_{\rm C} = 1 \ \mu A, I_{\rm E} = 0$ Collector-emitter voltage (Base open) $I_{C} = 1 \text{ mA}, I_{B} = 0$ 20 V V<sub>CEO</sub> Emitter-base voltage (Collector open) V<sub>EBO</sub> $I_E = 1 \ \mu A, I_C = 0$ 5 V $V_{CB} = 30 \text{ V}, I_E = 0$ Collector-base cutoff current (Emitter open) $I_{CBO}$ 1 μΑ $V_{EB} = 5 V, I_C = 0$ Emitter-base cutoff current (Collector open) $I_{EBO}$ 1 μΑ Forward current transfer ratio $V_{CE} = 5 V, I_C = 50 mA$ 100 600 $h_{FE}$ Collector-emitter saturation voltage $I_{C} = 50 \text{ mA}, I_{B} = 2.5 \text{ mA}$ 80 mV V<sub>CE(sat)</sub> Input resistance $R_1$ -30%4.7 +30%kΩ $V_{CB} = 10 \text{ V}, I_E = -50 \text{ mA}, f = 200 \text{ MHz}$ MHz Transition frequency $f_T$ 200

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

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

#### XN0F256

### Panasonic



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