# 2SC3929G

## Silicon NPN epitaxial planar type

For low-frequency output amplification Complementary to 2SA1531G

#### ■ Features

- Low noise voltage NV
- High forward current transfer ratio h<sub>FE</sub>
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

### ■ Absolute Maximum Ratings T<sub>a</sub> = 25°C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	55	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	55	V	
Emitter-base voltage (Collector open)	$V_{EBO}$	5	V	
Collector current	$I_{C}$	50	mA	
Peak collector current	$I_{CP}$	100	mA	
Collector power dissipation	$P_{\rm C}$	150	mW	
Junction temperature	T <sub>j</sub>	150	°C	
Storage temperature	$T_{stg}$	-55 to +150	°C	

#### Package

- Code SMini3-F2
- Marking Symbol: T
- Pin Name
  - 1. Base
  - 2. Emitter
  - 3. Collector

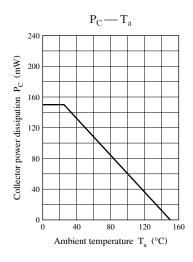
### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

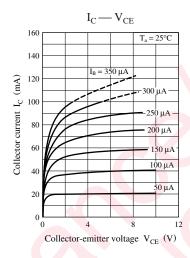
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = 10 \mu\text{A}, I_E = 0$	55			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = 2 \text{ mA}, I_B = 0$	55	25		V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 10 \ \mu A, I_C = 0$	5			V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 1 \text{ V}, I_{C} = 100 \text{ mA}$	7.9	0.7	1.0	V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 10 \text{ V}, I_{E} = 0$			0.1	μΑ
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = 10 \text{ V}, I_{B} = 0$			1	μΑ
Forward current transfer ratio *	$h_{FE}$	$V_{CE} = 5 \text{ V}, I_C = 2 \text{ mA}$	180		700	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			0.6	V
Transition frequency	$f_T$	$V_{CB} = 5 \text{ V}, I_{E} = -2 \text{ mA}, f = 200 \text{ MHz}$		100		MHz

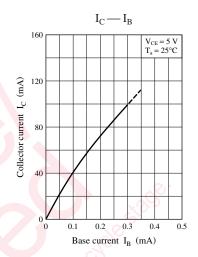
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

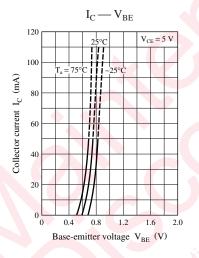
#### 2. \*: Rank classification

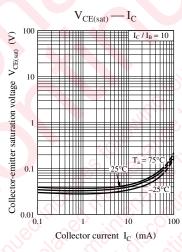
Rank	R	S	Т
$h_{FE}$	180 to 360	260 to 520	360 to 700
Marking symbol	TR	TS	TT

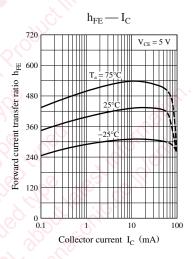


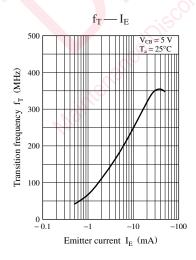


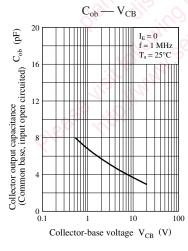


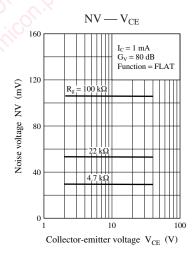




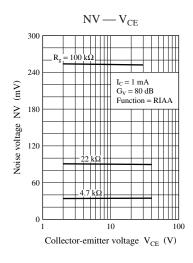


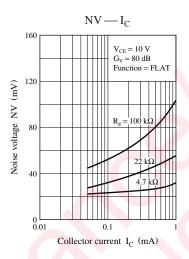


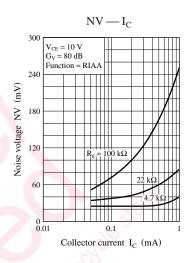


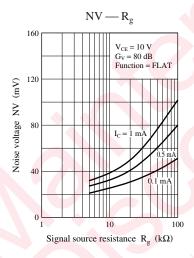


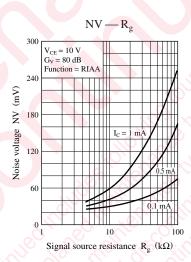
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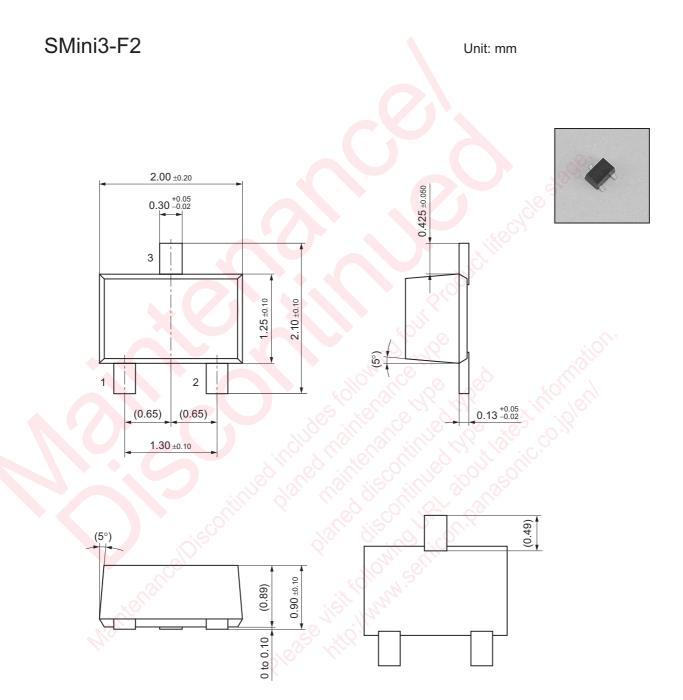








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