# 2SB1218G

## Silicon PNP epitaxial planar type

For general amplification Complementary to 2SD1819G

### ■ Features

- 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 and the magazine packing.

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

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	$V_{CBO}$	-45	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-45	V	
Emitter-base voltage (Collector open)	$V_{EBO}$	-7	V	
Collector current	$I_{C}$	-100	mA	
Peak collector current	$I_{CP}$	-200	mA	
Collector power dissipation	P <sub>C</sub>	150	mW	
Junction temperature	Tj	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	

### Package

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

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

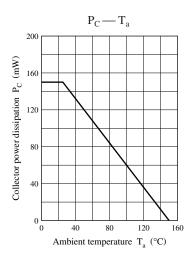
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = -10 \mu\text{A},  I_E = 0$	-45	0.		V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-45			V
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	$I_E = -10 \mu\text{A},  I_C = 0$	-7			V
Collector-base cutoff current (Emitter open)	I <sub>CBO</sub>	$V_{CB} = -20 \text{ V}, I_E = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)	I <sub>CEO</sub>	$V_{CE} = -10 \text{ V}, I_{B} = 0$			-100	μΑ
Forward current transfer ratio *	h <sub>FE</sub>	$V_{CE} = -10 \text{ V}, I_{C} = -2 \text{ mA}$	160		460	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$		- 0.3	- 0.5	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$		2.7		pF
(Common base, input open circuited)		C //				

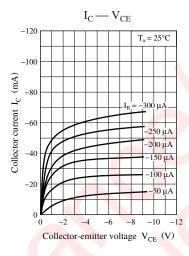
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

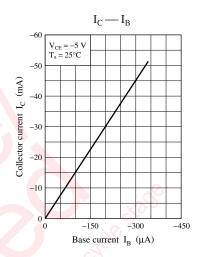
#### 2. \*: Rank classification

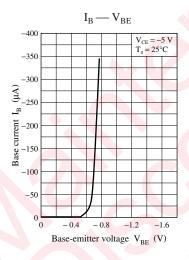
Rank	Q	R	S	No-rank
$h_{FE}$	160 to 260	210 to 340	290 to 460	160 to 460
Marking symbol	BQ	BR	BS	В

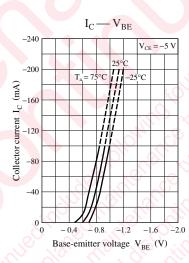
Product of no-rank is not classified and have no marking symbol for rank.

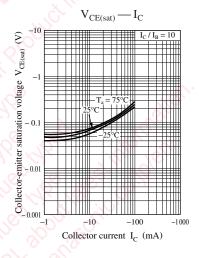


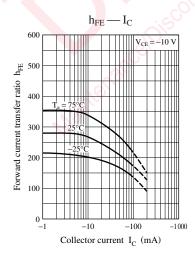


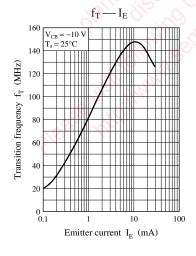


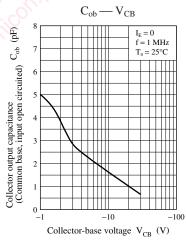




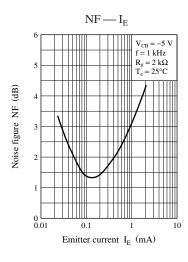


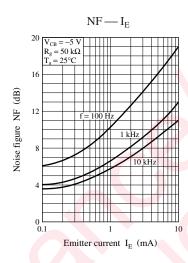


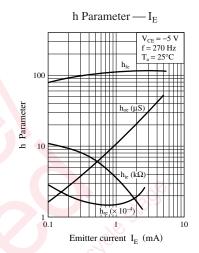


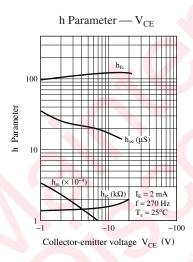


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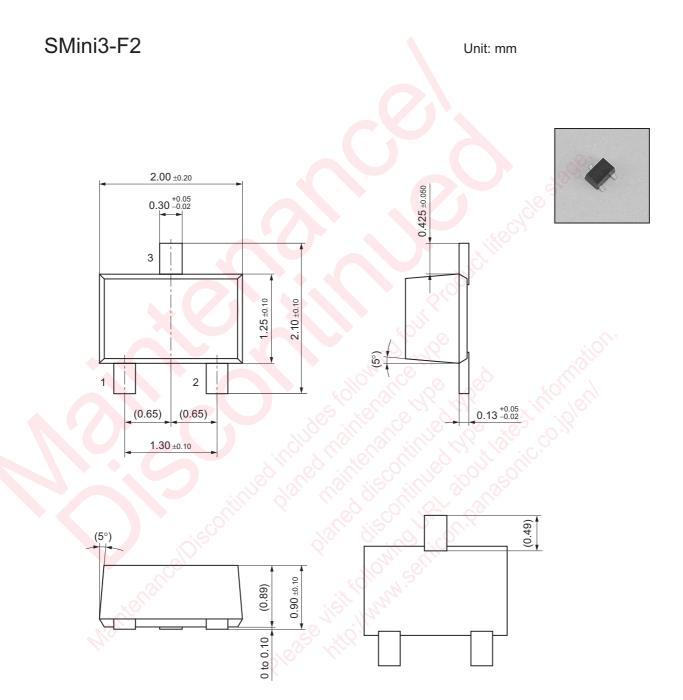








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