# 2SB1463G

## Silicon PNP epitaxial planar type

For high breakdown voltage low-noise amplification Complementary to 2SC2440G

#### ■ Features

- ullet High collector-emitter voltage (Base open)  $V_{CEO}$
- Low noise voltage NV
- SS-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing.

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

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	$V_{CBO}$	-150	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-150	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 <sub>C</sub>	125	mW	
Junction temperature	Tj	125	°CO	
Storage temperature	T <sub>stg</sub>	-55 to +125	°C	

#### ■ Package

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

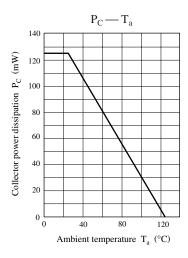
### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

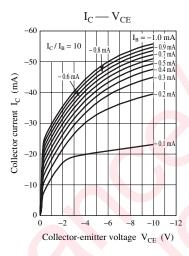
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = -100 \mu\text{A}, I_B = 0$	-150			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10 \mu A, I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -100 \text{ V}, I_E = 0$			-1	μΑ
Forward current transfer ratio *	h <sub>FE</sub>	$V_{CE} = -5 \text{ V}, I_{C} = -10 \text{ mA}$	130		330	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = -30 \text{ mA}, I_B = -3 \text{ mA}$			-1	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}, I_E = 10 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		4		pF
(Common base, input open circuited)		S XX				
Noise voltage	NV	$V_{CE} = -10 \text{ V}, I_{C} = -1 \text{ mA}, G_{V} = 80 \text{ dB}$		150		mV
		$R_g = 100 \text{ k}\Omega$ , Function = FLAT				

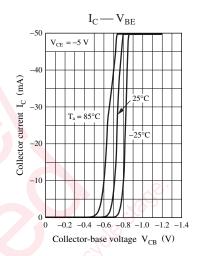
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

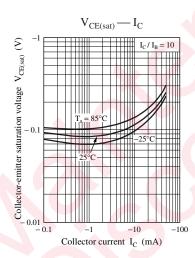
2. \*: Rank classification

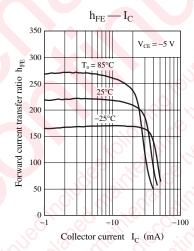
Rank	R	S
$h_{FE}$	130 to 220	185 to 330

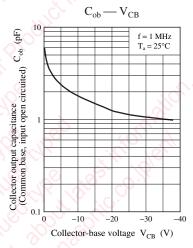




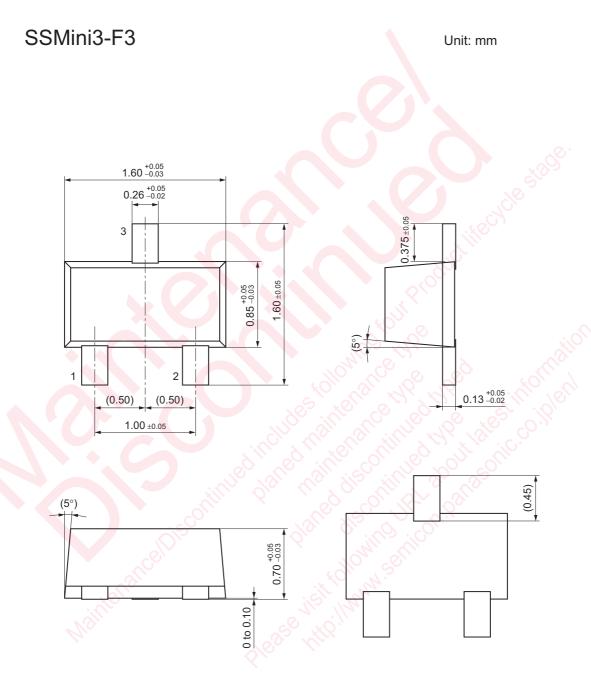








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