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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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2SB1219A

Silicon PNP epitaxial planar type

For general amplification

Complementary to 2SD1820A

■ Features

- Large collector current I_C
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	-60	V
Collector-emitter voltage (Base open)	V_{CEO}	-50	V
Emitter-base voltage (Collector open)	V_{EBO}	-5	V
Collector current	I_C	-500	mA
Peak collector current	I_{CP}	-1	A
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

■ Package

- Code SMini3-G1
- Pin Name
 1. Base
 2. Emitter
 3. Collector

■ Marking Symbol: D

■ 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}	$I_C = -10 \mu\text{A}, I_E = 0$	-60			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10 \mu\text{A}, I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -20 \text{ V}, I_E = 0$			-0.1	μA
Forward current transfer ratio ^{*1}	h_{FE1} ^{*2}	$V_{CE} = -10 \text{ V}, I_C = -150 \text{ mA}$	85		340	
	h_{FE2}	$V_{CE} = -10 \text{ V}, I_C = -500 \text{ mA}$	40			—
Collector-emitter saturation voltage ^{*1}	$V_{CE(\text{sat})}$	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$		-0.35	-0.60	V
Base-emitter saturation voltage ^{*1}	$V_{BE(\text{sat})}$	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$		-1.1	-1.5	V
Transition frequency	f_T	$V_{CB} = -10 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		6	15	pF

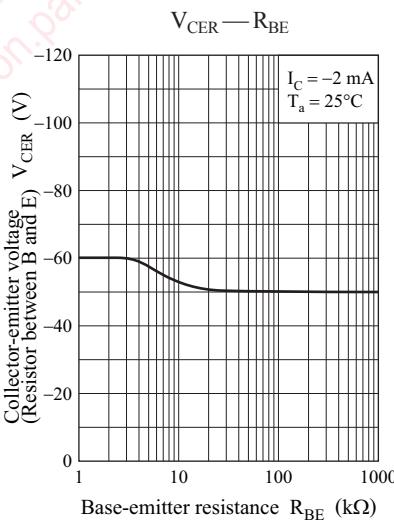
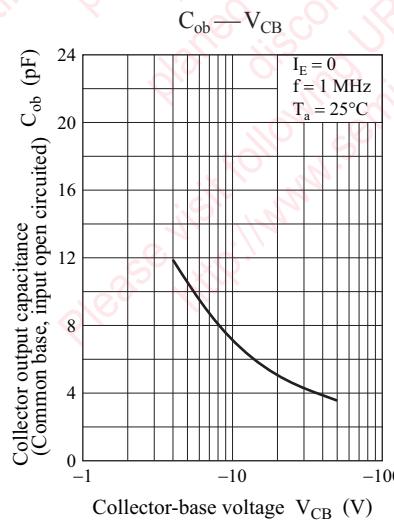
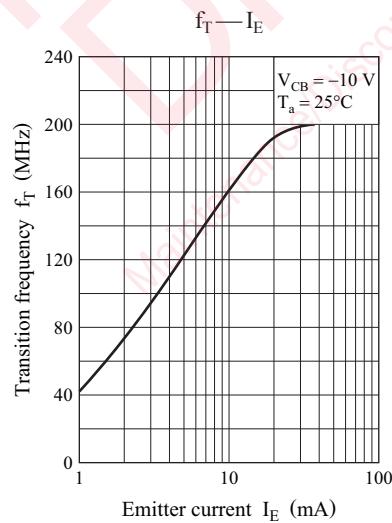
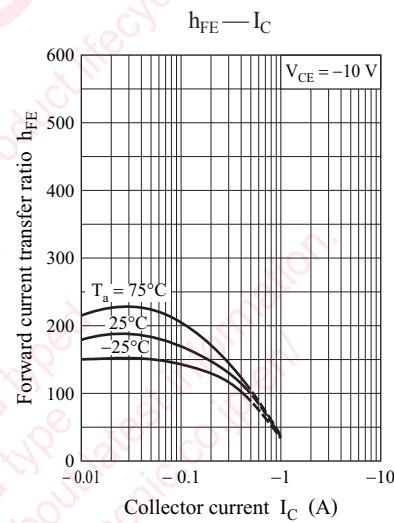
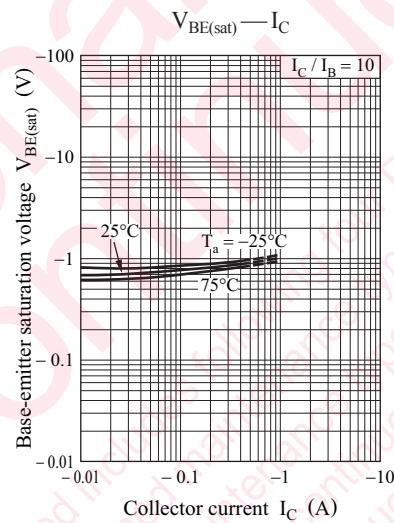
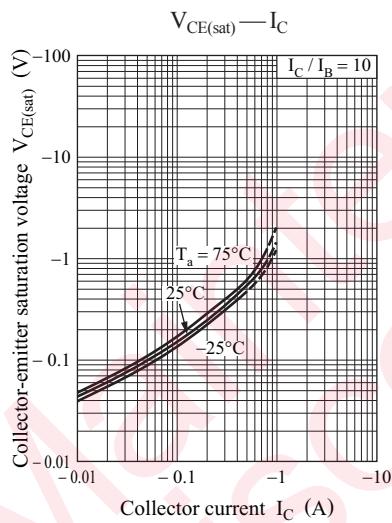
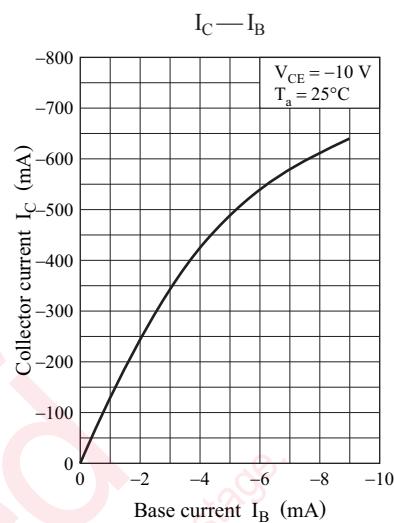
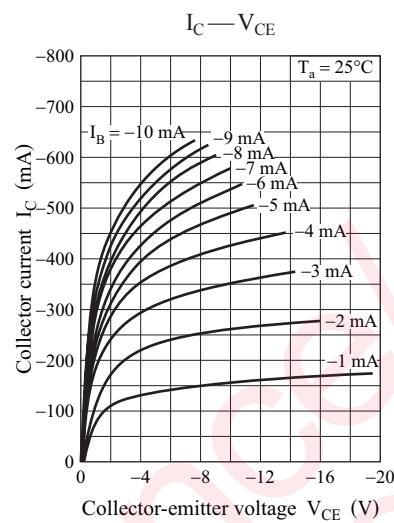
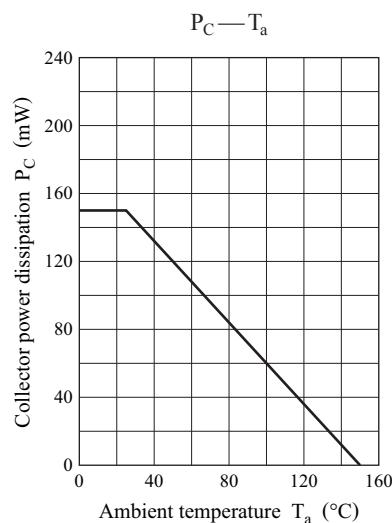
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *1: Pulse measurement

*2: Rank classification

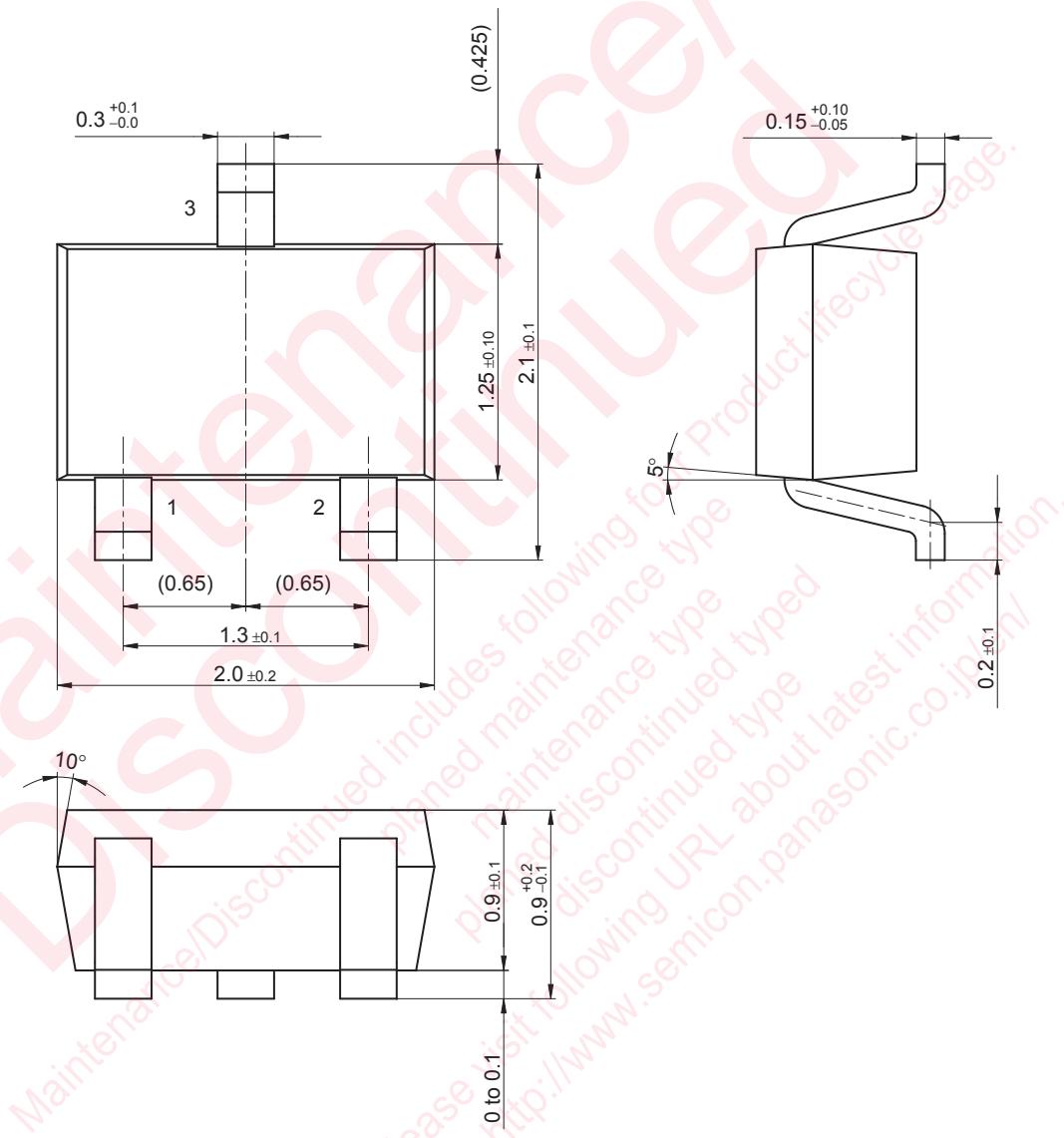
Rank	Q	R	S	No-rank
h_{FE1}	85 to 170	120 to 240	170 to 340	85 to 340
Marking symbol	DQ	DR	DS	D

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



SMini3-G1

Unit: mm



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