

2SB1219G

Silicon PNP epitaxial planar type

For general amplification Complementary to 2SD1820G

■ Features

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

■ Absolute Maximum Ratings $T_a = 25$ °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-F2
- Marking Symbol: D
- Pin Name
 - 1. Base
 - 2. Emitter
 - 3. Collector

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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10 \mu\text{A}, I_E = 0$	-60	0	C	V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-50			V
Emitter-base voltage (Collector open)	V _{EBO}	$I_E = -10 \mu A, I_C = 0$	-5	350		V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -20 \text{ V}, I_E = 0$	N N	O	- 0.1	μΑ
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(sat)}	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$		- 0.35	- 0.60	V
Base-emitter saturation voltage *1	V _{BE(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	C _{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		6	15	pF
(Common base, input open circuited)						

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

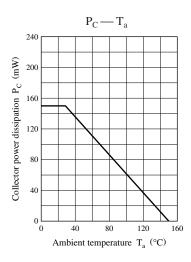
2. *1: Pulse measurement

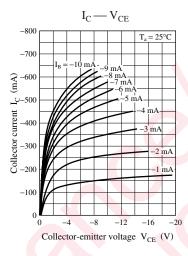
*2: Rank classification

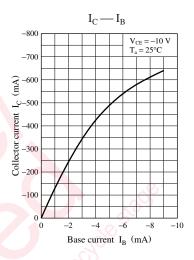
Rank	Q	R	S	No-rank
h _{FE1}	85 to 170	120 to 240	170 to 340	85 to 340
Marking symbol	DQ	DR	DS	D

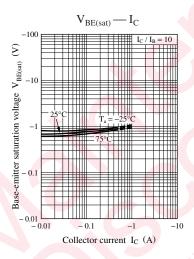
Note) Product of no-rank is not classified and have no marking symbol for rank.

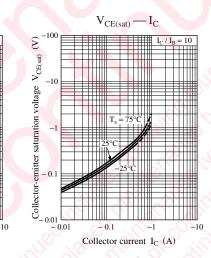
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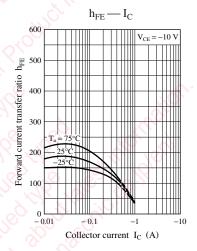


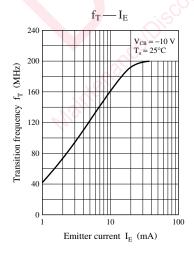


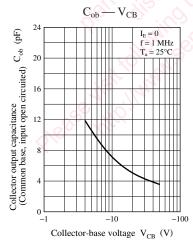


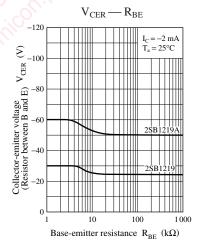




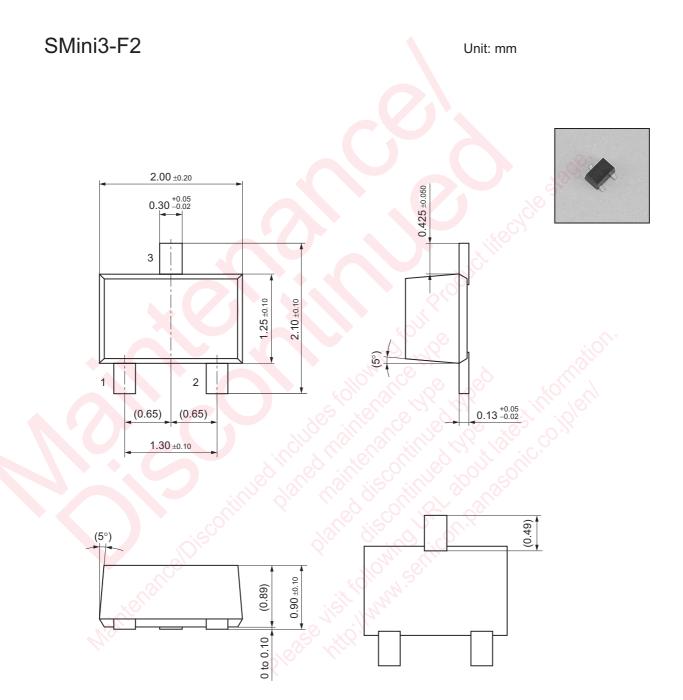








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