2SB1219, 2SB1219A

Silicon PNP epitaxial planar type

For general amplification

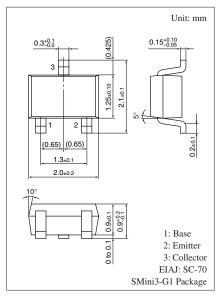
Complementary to 2SD1820 and 2SD1820A

■ 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	2SB1219	V _{CBO}	-30	V
(Emitter open)	2SB1219A		-60	
Collector-emitter voltage	2SB1219	V _{CEO}	-25	V
(Base open)	2SB1219A		-50	
Emitter-base voltage (Coll	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	



Marking Symbol:

• 2SB1219: C • 2SB1219A: D

■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

Parameter		Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage	2SB1219	V _{CBO}	$I_C = -10 \ \mu A, \ I_E = 0$	-30			V
(Emitter open)	2SB1219A			-60			
Collector-emitter voltage	2SB1219	V _{CEO}	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-25			V
(Base open)	2SB1219A			-50			
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}	$V_{CB} = -20 \text{ V}, I_E = 0$			- 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)						

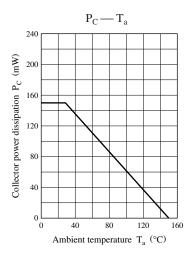
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

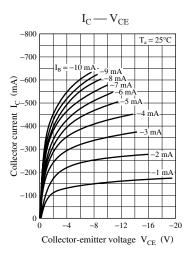
2. *1: Pulse measurement

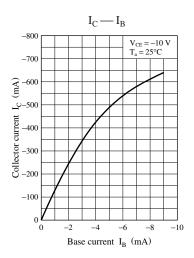
*2: Rank classification

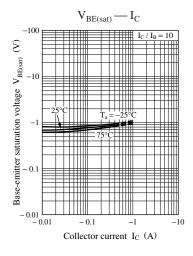
Ra	ank	Q	R	S	No-rank
h _I	FE1	85 to 170	120 to 240	170 to 340	85 to 340
Marking	2SB1219	CQ	CR	CS	С
symbol	2SB1219A	DQ	DR	DS	D

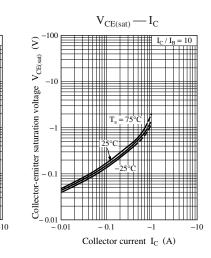
Note) Product of no-rank is not classified and have no marking symbol for rank.

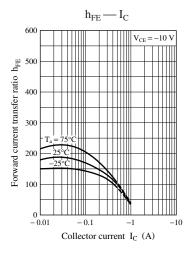


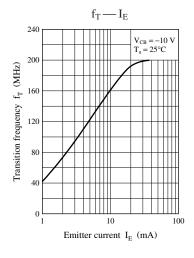


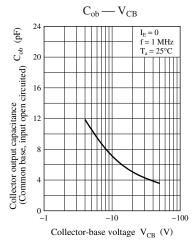


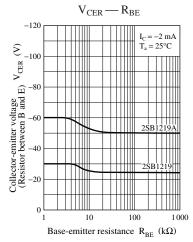












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