2SB1220

Silicon PNP epitaxial planar type

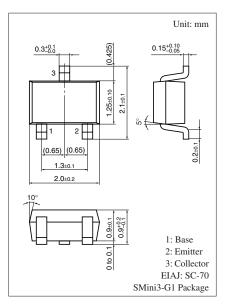
For high breakdown voltage low-noise amplification Complementary to 2SD1821

Features

- High collector-emitter voltage (Base open) V_{CEO}
- Low noise voltage NV
- 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}	-150	V
Collector-emitter voltage (Base open)	V _{CEO}	-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 _C	150	mW
Junction temperature	Tj	150	°C
Storage temperature	T _{stg}	-55 to +150	°C



Marking Symbol: I

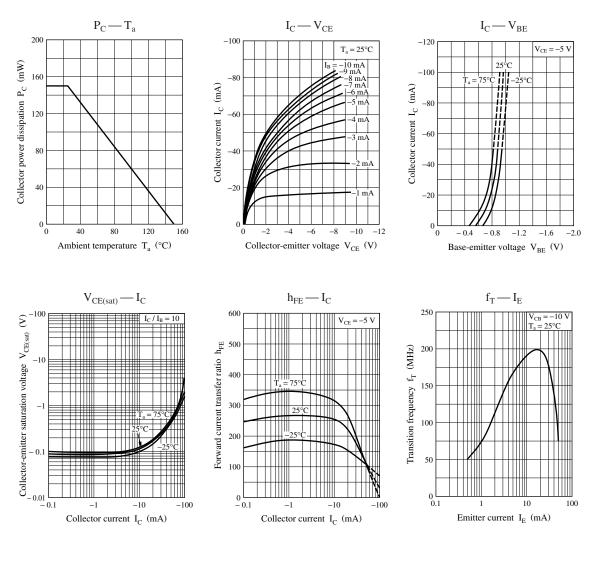
\blacksquare Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

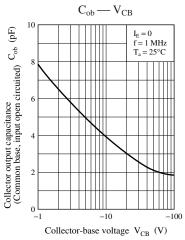
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-emitter voltage (Base open)	V _{CEO}	$I_{C} = -100 \ \mu A, \ I_{B} = 0$	-150			V
Emitter-base voltage (Collector open)	V _{EBO}	$I_E = -10 \ \mu A, \ I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = -100 \text{ V}, I_E = 0$			-1	μΑ
Forward current transfer ratio *	h _{FE}	$V_{CE} = -5 \text{ V}, I_C = -10 \text{ mA}$	130		450	_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = -30$ mA, $I_{\rm B} = -3$ 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 (Common base, input open circuited)	C _{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		4		pF
Noixe voltage	NV	$V_{CE} = -10 \text{ V}, I_C = -1 \text{ mA}, G_V = 80 \text{ dB}$ $R_g = 100 \text{ k}\Omega$, Function = FLAT		150		mV

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

2. *: Rank classification

Rank	R	S	Т
h _{FE}	130 to 220	185 to 330	260 to 450





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