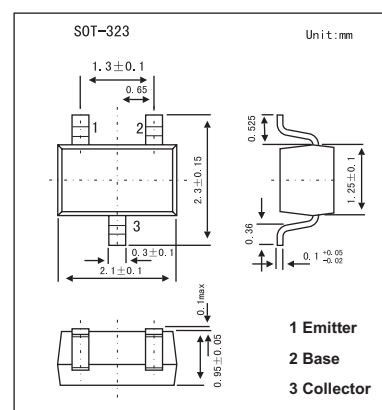


Silicon PNP Epitaxial Planar Type

2SB1220

■ Features

- High collector-emitter voltage V_{CE0}
- Low noise voltage NV

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-150	V
Collector-emitter voltage	V_{CE0}	-150	V
Emitter-base voltage	V_{EB0}	-5	V
Peak collector current	I_{CP}	-100	mA
Collector current	I_C	-50	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-emitter voltage	V_{CE0}	$I_C = -100 \mu\text{A}, I_B = 0$	-150			V
Emitter-base voltage	V_{EB0}	$I_E = -10 \mu\text{A}, I_C = 0$	-5			V
Collector-base cutoff current	I_{CBO}	$V_{CB} = -100 \text{V}, I_E = 0$			-1	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = -5 \text{V}, I_C = -10 \text{mA}$	130		450	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -30 \text{mA}, I_B = -3 \text{mA}$			-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_{ob}	$V_{CB} = -10 \text{V}, I_E = 0, f = 1 \text{MHz}$		4		pF
Noise voltage	NV	$V_{CE} = -10 \text{V}, I_C = -1 \text{mA}, G_v = 80 \text{dB}, R_g = 100\text{K}\Omega, \text{Function} = \text{FLAT}$		150		mV

■ h_{FE} Classification

Marking	I		
	R	S	T
h_{FE}	130~220	185~330	260~450