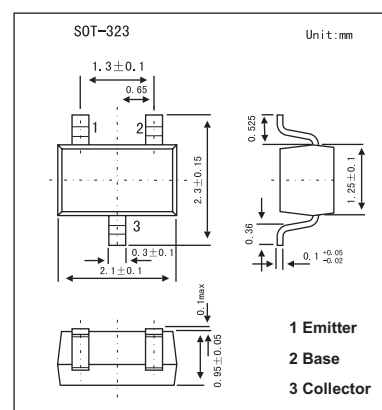


Silicon PNP Epitaxial Planar Type

2SB1220

■ Features

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

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-150	V
Collector-emitter voltage	V_{CEO}	-150	V
Emitter-base voltage	V_{EBO}	-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_{CEO}	$I_C = -100\ \mu\text{A}$, $I_B = 0$	-150			V
Emitter-base voltage	V_{EBO}	$I_E = -10\ \mu\text{A}$, $I_C = 0$	-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	$V_{CE} = -10\ \text{V}$, $I_C = -1\ \text{mA}$, $G_v = 80\ \text{dB}$, $R_g = 100\ \text{K}\Omega$, Function = FLAT		150		mV

■ h_{FE} Classification

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