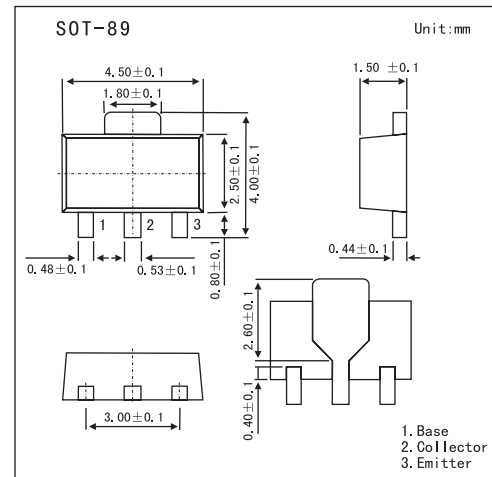


PNP Epitaxial Planar Silicon Transistors

2SB1122

■ Features

- Adoption of FBET process..
- Very small size making it easy to provide highdensity hybrid IC's.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-60	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-1	A
Collector current (pulse)	I_{CP}	-2	A
Collector dissipation	P_C	500	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

2SB1122

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit	
Collector cutoff current	ICBO	V _{CB} = -50V, I _E = 0			-100	nA	
Emitter cutoff current	IEBO	V _{CB} = -4V, I _E = 0			-100	nA	
DC current Gain	hFE	V _{CE} = -2V, I _C = -100mA	100		560		
Gain bandwidth product	f _T	V _{CE} = -10V, I _C = -50mA		150		MHz	
Output capacitance	C _{ob}	V _{CB} = -10V, f = 1MHz		12		pF	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -500mA, I _B = -50mA		-180	-500	V	
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -500mA, I _B = -50mA		-0.9	-1.2	V	
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -10μA, I _E = 0	-60			V	
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	-50			V	
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _C = 0	-5			V	
Turn-on time	ton	<p>I_C = 10 I_{B1} = -10 I_{B2} = 500mA</p>		40		ns	
Storage time	tstg				300		ns
Fall time	tf				30		ns

■ hFE Classification

Marking	BE			
Rank	R	S	T	U
hFE	100~200	140~280	200~400	280~560