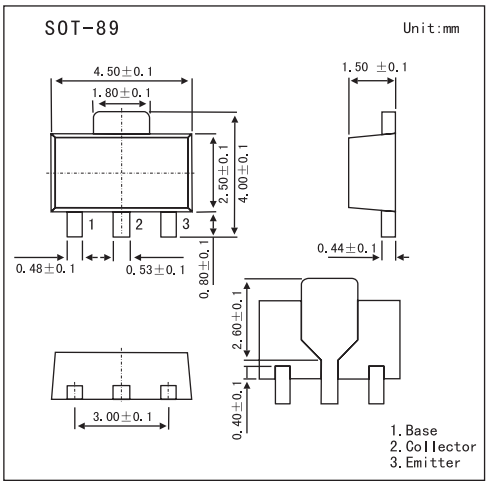
PNP Epitaxial Planar Silicon Transistor

2SB1396



Features

- Adoption of FBET,MBIT processes
- Large current capacity
- Low collector to emitter saturation voltage

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-15	V
Collector-emitter voltage	V_{CEO}	-10	V
Emitter-base voltage	V_{EBO}	-7	V
Collector current	I_C	-3	A
Collector current (Pulse)	I_{CP}	-5	A
Collector dissipation *	P_C *	1.3	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* Mounted on ceramic PCB (250mm^{2}X0.8mm)

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = -12V, I_E=0			-100	μA
Emitter cutoff current	I_{EBO}	V_{EB} = -6V, I_C=0			-100	μA
DC current Gain	h_{FE}	V_{CE} =-2V , I_C = -0.5A	140		560	
		V_{CE} =-2V , I_C = -3A	70			
Gain bandwidth product	f_T	V_{CE} =-2V , I_C = -0.3A		400		GHz
Output capacitance	C_{ob}	V_{CE} = -10V , f=1MHz		26		pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=-1.5A,I_B=-30mA		-220	-400	mV
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=-1.5A,I_B=-30mA		-0.9	-1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=-10μA,I_E=0	-15			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=-1mA,R_{BE}=∞	-10			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E=-10μA,I_C=0	-7			V

h_{FE} Classification

Marking	BO		
Rank	S	T	U
hFE	140～280	200～400	280～560