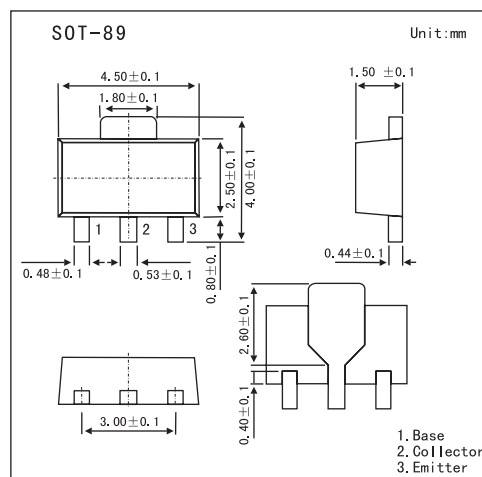


PNP Epitaxial Planar Silicon Transistor

2SB1396

■ Features

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

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

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	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* Mounted on ceramic PCB (250mm²X0.8mm)

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

Parameter	Symbol	Testconditions	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}	$V_{CE} = -10V, f = 1\text{MHz}$		26		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -1.5A, I_B = -30\text{mA}$		-220	-400	mV
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -1.5A, I_B = -30\text{mA}$		-0.9	-1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-15			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-10			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-7			V

■ h_{FE} Classification

Marking	BO		
Rank	S	T	U
h_{FE}	140~280	200~400	280~560