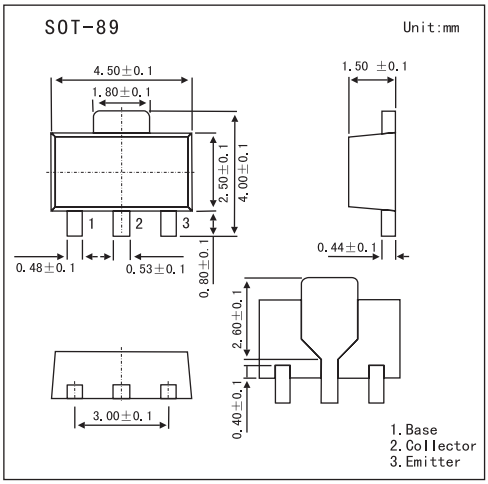
PNP Epitaxial Planar Silicon Transistors

2SB1397



■ Features

- Low saturation voltage.
- Contains diode between collector and emitter.
- Contains bias resistance between base and emitter.
- Large current capacity.
- Small-sized package making it easy to provide highdensity, small-sized hybrid ICs.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-25	V
Collector-emitter voltage	V_{CEO}	-20	V
Emitter-base voltage	V_{EBO}	-6	V
Collector current	I_C	-2	A
Collector current (pulse)	I_{CP}	-4	A
Collector dissipation	P_C *	1.3	W
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* Mounted on ceramic board ($250mm^2$X0.8mm)

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = -20V , I_E = 0			-1	nA
DC current Gain	h_{FE}	V_{CE} = -2V , I_C = -0.5A	70			
		V_{CE} = -2V , I_C = -2A	50			
Gain bandwidth product	f_T	V_{CE} = -2V , I_C = -0.5A		300		MHz
Output capacitance	C_{ob}	V_{CB} = -10V , f = 1MHz		40		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = -1A , I_B = -50mA		-0.25	-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = -1A , I_B = -50mA			-1.5	V
Collector-to-base breakdown voltage	$V_{(BR)CBO}$	I_C = -10μA , I_E = 0	-25			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO1}$	I_C = -10μA , R_{BE} = ∞	-25			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO2}$	I_C = -10mA , R_{BE} = ∞	-20			
Diode forward voltage	V_F	I_F=0.5A			-1.5	V
Base-emitter resistance	R_{BE}			1.6		KΩ

■ Marking

Marking	BP