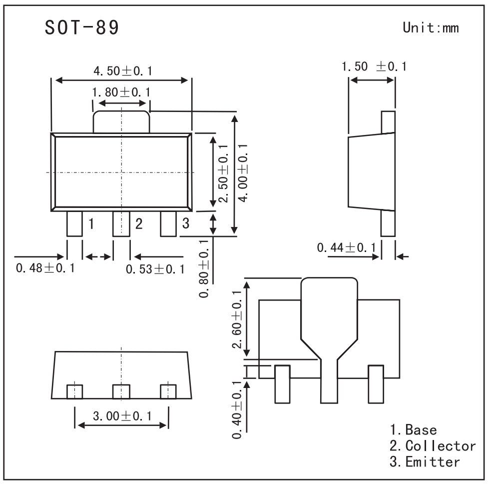
PNP Silicon Epitaxial Transistor

2SB804



■ Features

- ● World standard miniature package:SOT-89
- ● High collector to base voltage:V_{CBO}＞-100V
- ● Excellent DC current gain linearity.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-100	V
Collector to emitter voltage	V_{CEO}	-80	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-1	mA
Collector current(Pulse) *	I_C	-1.5	mA
Total power dissipation	P_T	2	W
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-55 to +150	℃

* PW⩽10ms,duty cycle⩽50%.

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = -100 V, I_E = 0			-100	nA
Emitter cutoff current	I_{EBO}	V_{EB} = -5.0 V, I_C = 0			-100	nA
DC current gain *	h_{FE}	V_{CE} = -2.0 V, I_C = -100 mA	90	200	400	
		V_{CE} = -2.0 V, I_C = -500 mA	25	80		
Collector saturation voltage *	$V_{CE(sat)}$	I_C = -500mA, I_B = -50mA		-0.29	-0.5	V
Base saturation voltage *	$V_{BE(sat)}$	I_C = -500mA, I_B = -50mA		-0.9	-1.5	V
Base-emitter voltage *	V_{BE}	V_{CE} = -10 V, I_C = -10 mA	-600	-640	-700	mV
Gain bandwidth product	f_T	V_{CE} = -5.0 V, I_E = 10 mA		80		MHz
Output capacitance	C_{ob}	V_{CB} = -10 V, I_E = 0 , f = 1.0 MHz		26		pF

* Pulsed: PW ⩽ 350 μs, duty cycle ⩽ 2%

■ h_{FE} Classification

Marking	AW	AV	AU
h_{FE}	90～180	135～270	200～400