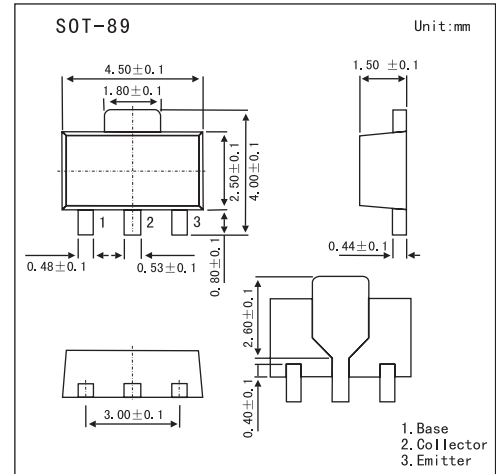


PNP Silicon Epitaxial Transistor

2SB804

■ Features

- World standard miniature package:SOT-89
- High collector to base voltage: $V_{CB0} > -100V$
- Excellent DC current gain linearity.

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CB0}	-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	$^\circ C$
Storage temperature range	T_{stg}	-55 to +150	$^\circ C$

* $PW \leq 10ms$, duty cycle $\leq 50\%$.

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	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: $PW \leq 350 \mu s$, duty cycle $\leq 2\%$

■ h_{FE} Classification

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