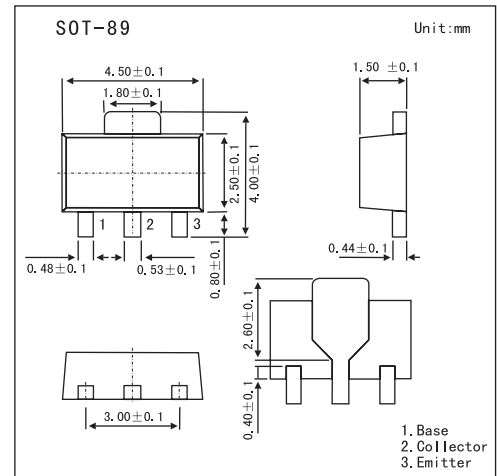


PNP Silicon Epitaxial Transistor

2SB800

■ Features

- World standard miniature package:SOT-89
- High collector to emitter voltage: $V_{CE0} > -80V$

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CB0}	-80	V
Collector to emitter voltage	V_{CE0}	-80	V
Emitter to base voltage	V_{EB0}	-5	V
Collector current	I_c	-300	mA
Collector current(Pulse) *	I_c	-500	mA
Total power dissipation	P_T	2.0	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150	$^\circ\text{C}$

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

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I_{cB0}	$V_{CB} = -80\text{ V}$, $I_E = 0$			-100	nA
Emitter cutoff current	I_{EB0}	$V_{EB} = -5.0\text{ V}$, $I_C = 0$			-100	nA
DC current gain *	h_{FE}	$V_{CE} = -1.0\text{ V}$, $I_c = -50\text{ mA}$	90	200	400	
		$V_{CE} = -2.0\text{ V}$, $I_c = -300\text{ mA}$	30	80		
Collector saturation voltage *	$V_{CE(sat)}$	$I_c = -300\text{ mA}$, $I_B = -30\text{ mA}$		-0.3	-0.6	V
Base saturation voltage *	$V_{BE(sat)}$	$I_c = -300\text{ mA}$, $I_B = -30\text{ mA}$		-0.9	-1.2	V
Base-emitter voltage *	V_{BE}	$V_{CE} = -6.0\text{ V}$, $I_c = -10\text{ mA}$	-600	-660	-700	mV
Gain bandwidth product	f_T	$V_{CE} = -6.0\text{ V}$, $I_E = 10\text{ mA}$		100		MHz
Output capacitance	C_{ob}	$V_{CB} = -6.0\text{ V}$, $I_E = 0$, $f = 1.0\text{ MHz}$		13		pF

* Pulsed: $PW \leq 350\ \mu\text{s}$, duty cycle $\leq 2\%$

■ h_{FE} Classification

Marking	FM	FL	FK
h_{FE}	90~180	135~270	200~400