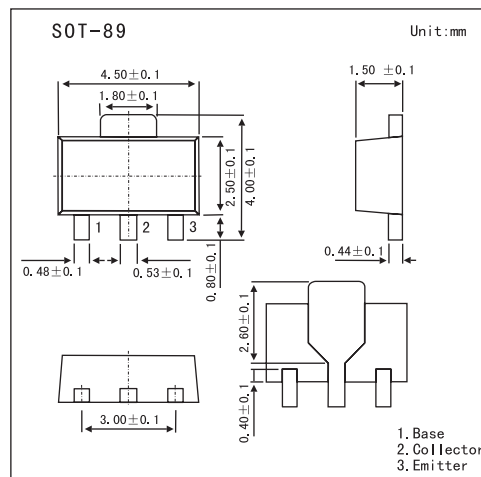


# 2SB800

### ■ Features

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



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

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

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

### ■ $h_{FE}$ Classification

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