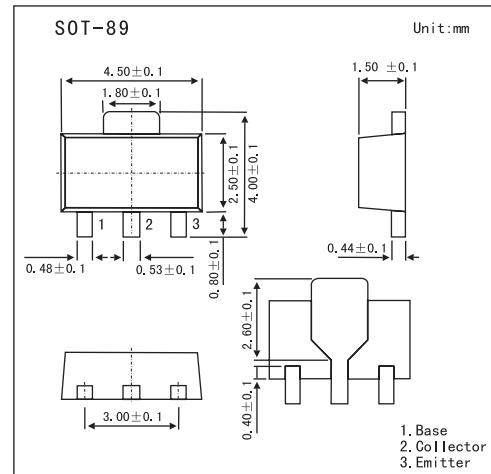


## PNP Silicon Epitaxial Transistor

### 2SB799



#### ■ Features

- World standard miniature package:SOT-89
- Low collector saturation voltage: $V_{CE(sat)} < -0.4V$ ( $I_C = -500mA, I_B = -50mA$ )

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	-60	V
Collector to emitter voltage	$V_{CEO}$	-50	V
Emitter to base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-0.7	A
Collector current(Pulse) *	$I_C$	-1.0	A
Total power dissipation	$P_T$	2	W
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature range	$T_{stg}$	-55 to +150	$^\circ C$

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

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -60 V, I_E = 0$			-100	nA
Emitter cutoff current	$I_{EBO}$	$V_{EB} = -5.0 V, I_C = 0$			-100	nA
DC current gain *	$h_{FE}$	$V_{CE} = -1.0 V, I_C = -100 mA$	90	200	400	
		$V_{CE} = -1.0 V, I_C = -500 mA$	50	120		
Collector saturation voltage *	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.16	-0.4	V
Base saturation voltage *	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.9	-1.2	V
Base-emitter voltage *	$V_{BE}$	$V_{CE} = -6.0 V, I_C = -10 mA$	-600	-630	-700	mV
Gain bandwidth product	$f_T$	$V_{CE} = -6.0 V, I_E = 10 mA$		120		MHz
Output capacitance	$C_{ob}$	$V_{CB} = -6.0 V, I_E = 0, f = 1.0 MHz$		25		pF

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

#### ■ hFE Classification

Marking	MM	ML	MK
$h_{FE}$	90~180	135~270	200~400