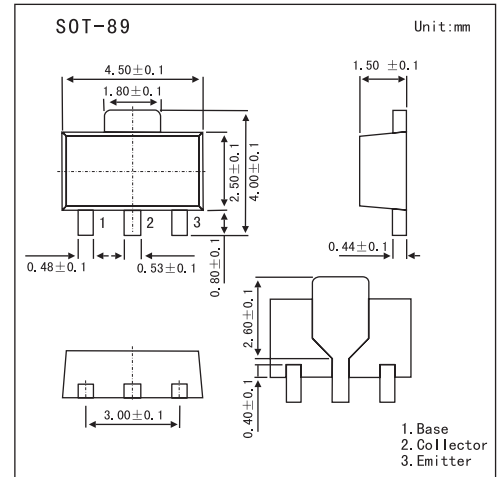


## PNP Silicon Epitaxial Transistor

## 2SB1115

## ■ Features

- World standard miniature package.
- Low  $V_{CE(sat)}$ :  $V_{CE(sat)} = -0.2V$  at 1A

■ 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	$V_{EBO}$	-6	V
Collector current	$I_C$	-1	A
Collector current (pulse) *	$I_C$	-2	A
Total power dissipation	$P_T$	2	W
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature range	$T_{stg}$	-55 to +150	$^\circ C$

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

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -60$ V, $I_E = 0$			-100	nA
Emitter cutoff current	$I_{EBO}$	$V_{EB} = -6.0$ V, $I_C = 0$			-100	nA
DC current gain *	$h_{FE}$	$V_{CE} = -2.0$ V, $I_C = -100$ mA	135	340	600	
		$V_{CE} = -2.0$ V, $I_C = -1.0$ A	100	200		
Collector saturation voltage *	$V_{CE(sat)}$	$I_C = -1.0$ A, $I_B = -50$ mA		-0.2	-0.3	V
Base saturation voltage *	$V_{BE(sat)}$	$I_C = -1.0$ A, $I_B = -50$ mA		-0.9	-1.2	V
Base-emitter voltage *	$V_{BE}$	$V_{CE} = -2.0$ V, $I_C = -50$ mA	-600		-700	V
Gain bandwidth product	$f_T$	$V_{CE} = -2.0$ V, $I_E = -100$ mA	80	120		MHz
Output capacitance	$C_{ob}$	$V_{CB} = -10$ V, $I_E = 0$ , $f = 1.0$ MHz		25		pF

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

■  $h_{FE}$  Classification

Marking	YM	YL	YK
$h_{FE}$	135~270	200~400	300~600