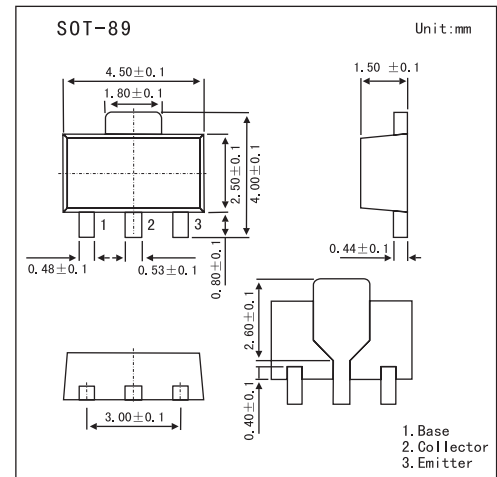


PNP Silicon Epitaxial Transistor

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: $PW \leq 350$ μs , duty cycle $\leq 2\%$

■ h_{FE} Classification

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