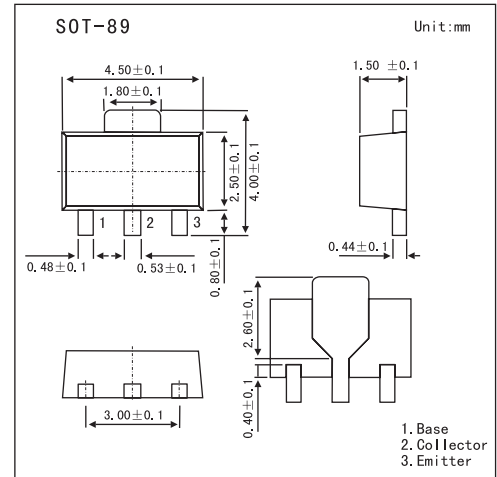


## Silicon PNP Epitaxial Planar Type

## 2SB1073

## ■ Features

- Low collector-emitter saturation voltage  $V_{CE(sat)}$
- Large peak collector current  $I_{CP}$
- Mini Power type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	-30	V
Collector-emitter voltage	$V_{CEO}$	-20	V
Emitter-base voltage	$V_{EBO}$	-7	V
Peak collector current	$I_{CP}$	-4	A
Collector current	$I_C$	-7	mA
Collector power dissipation	$P_C$	1	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base voltage	$V_{CBO}$	$I_C = -10 \mu\text{A}, I_E = 0$	-30			V
Collector-emitter voltage	$V_{CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-20			V
Emitter-base voltage	$V_{EBO}$	$I_E = -10 \mu\text{A}, I_C = 0$	-7			V
Collector-base cutoff current	$I_{CBO}$	$V_{CB} = -30 \text{ V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter-base cutoff current	$I_{EBO}$	$V_{EB} = -7 \text{ V}, I_C = 0$			-0.1	$\mu\text{A}$
Forward current transfer ratio	$h_{FE}$	$V_{CE} = -2 \text{ V}, I_C = -2 \text{ A}$	120		315	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -3 \text{ A}, I_B = -0.1 \text{ A}$		-0.6	-1.0	V
Transition frequency	$f_T$	$V_{CB} = -6 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		120		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		4		pF

■  $h_{FE}$  Classification

Marking	IP	IQ
$h_{FE}$	120~205	180~315