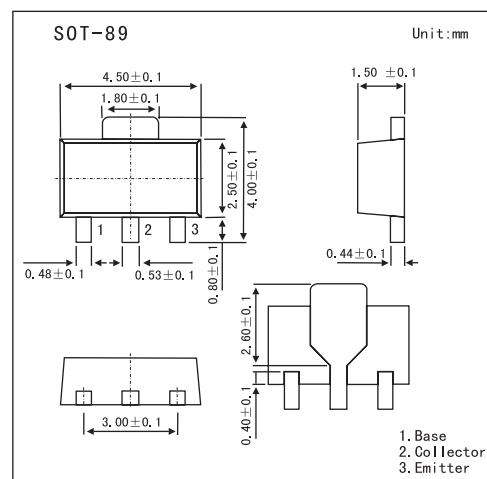


## Silicon PNP Epitaxial Planar Type

## 2SB1539

## ■ Features

- Low collector to emitter saturation voltage  $V_{CE(sat)}$ .
- Large collector power dissipation  $P_C$ .
- 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	$V_{CB0}$	-20	V
Collector-emitter voltage	$V_{CE0}$	-20	V
Emitter-base voltage	$V_{EB0}$	-5	V
Peak collector current	$I_{CP}$	-1.2	A
Collector current	$I_C$	-1	A
Collector power dissipation	$P_C$	1	W
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 cutoff current	$I_{CBO}$	$V_{CB} = -7\text{ V}, I_E = 0$			-1	$\mu\text{A}$
Collector-base voltage	$V_{CB0}$	$I_C = -10\ \mu\text{A}, I_E = 0$	-20			V
Collector-emitter voltage	$V_{CE0}$	$I_C = -1\ \text{mA}, I_B = 0$	-20			V
Emitter-base voltage	$V_{EB0}$	$I_E = -10\ \mu\text{A}, I_C = 0$	-5			V
Forward current transfer ratio	$h_{FE}$	$V_{CE} = -2\ \text{V}, I_C = -100\ \text{mA}$	200		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\ \text{mA}, I_B = -10\ \text{mA}$			-0.2	V
Transition frequency	$f_T$	$V_{CB} = -10\ \text{V}, I_E = 50\ \text{mA}, f = 200\ \text{MHz}$		120		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -10\ \text{V}, I_E = 0, f = 1\ \text{MHz}$		30		pF

## ■ Marking

Marking	1N