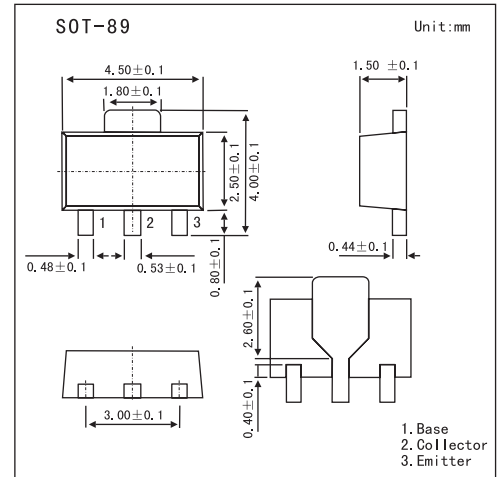


Silicon PNP Epitaxial Planar Type

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	μA
Emitter-base cutoff current	I_{EBO}	$V_{EB} = -7 \text{ V}$, $I_C = 0$			-0.1	μA
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