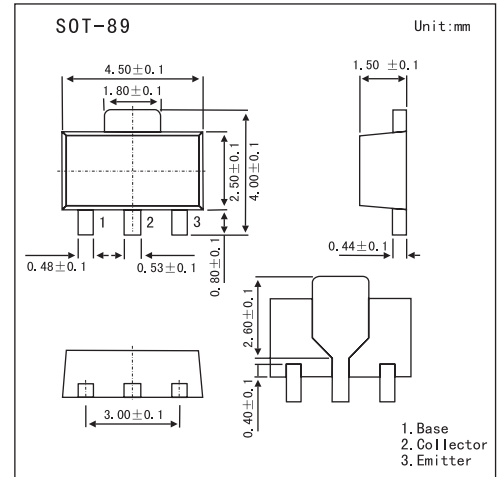


Silicon PNP Epitaxial

2SB1027



■ Features

- Low frequency amplifier

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CB0}	-180	V
Collector to emitter voltage	V_{CE0}	-160	V
Emitter to base voltage	V_{EB0}	-5	V
Collector current	I_C	-1.5	A
Collector peak current	$i_{C(\text{peak})}^*1$	-3	A
Collector power dissipation	P_C^*2	1	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to 150	$^\circ\text{C}$

*1 $PW \leq 10 \text{ ms}$, Duty cycle $\leq 20\%$

*2 Value on the alumina ceramic board (12.5X 20X 0.7 mm)

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1 \text{ mA}$, $I_E = 0$	-180			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10 \text{ mA}$, $R_{BE} = \infty$	-120			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1 \text{ mA}$, $I_C = 0$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -160 \text{ V}$, $I_E = 0$			-10	μA
DC current transfer ratio	h_{FE}	$V_{CE} = -5 \text{ V}$, $I_C = -0.15 \text{ A}$,	60		320	
		$V_{CE} = -5 \text{ V}$, $I_C = -0.5 \text{ A}$,	30			
Collector to emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = -0.5 \text{ A}$, $I_B = -50 \text{ mA}$,			-1.0	V
Base to emitter voltage	V_{BE}	$V_{CE} = -5 \text{ V}$, $I_C = -0.15 \text{ A}$,			-0.9	V

■ h_{FE} Classification

Marking	EH	EJ	EK
h_{FE}	60 to 120	100 to 200	160 to 320