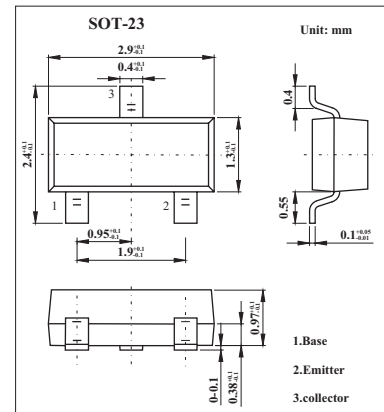


## Silicon PNP Epitaxial

## 2SB831

## ■ Features

- Low frequency amplifier.

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	-25	V
Collector to emitter voltage	$V_{CEO}$	-20	V
Emitter to base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-0.7	A
peak collector current	$I_{CP}$	1	A
Collector power dissipation	$P_C$	150	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 to base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10 \mu\text{A}, I_E = 0$	-25			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, R_{BE} = \infty$	-20			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10 \mu\text{A}, I_C = 0$	-5			V
Collector cutoff current	$I_{CBO}$	$V_{CB} = -20 \text{ V}, I_E = 0$			-1	mA
DC current transfer ratio *	$h_{FE}$	$V_{CE} = -1 \text{ V}, I_C = -0.15 \text{ A}$	85		240	
Collector to emitter saturation voltage *	$V_{CE(sat)}$	$I_C = -0.5 \text{ A}, I_B = -0.05 \text{ A}$			-0.5	V
Base to emitter voltage *	$V_{BE}$	$V_{CE} = -1 \text{ V}, I_C = -0.15 \text{ A}$			-1	V

\* Pulse test.

■  $h_{FE}$  Classification

Marking	BB	BC
$h_{FE}$	85~170	120~240