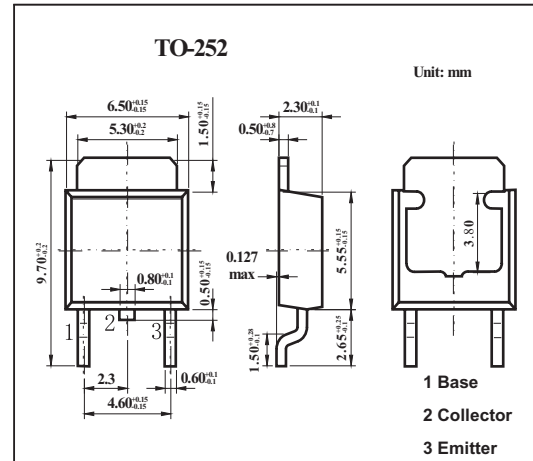


## Silicon PNP Epitaxial Planar Type

## 2SB968

## ■ Features

- Possible to solder the radiation fin directly to printed circuit board.
- High collector-emitter voltage  $V_{CE0}$ .
- Large collector power dissipation  $P_c$ .

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-50	V
Collector-emitter voltage	$V_{CE0}$	-40	V
Emitter-base voltage	$V_{EB0}$	-5	V
Collector current	$I_c$	-1.5	A
Peak collector current	$I_{CP}$	-3	A
Collector power dissipation	$P_c$	10	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-base voltage	$V_{CB0}$	$I_c = -1 \text{ mA}, I_E = 0$	-50			V
Collector-emitter voltage	$V_{CE0}$	$I_c = -2 \text{ mA}, I_B = 0$	-40			V
Collector-base cutoff current	$I_{CB0}$	$V_{CB} = -20 \text{ V}, I_E = 0$			-1	$\mu\text{A}$
Collector cutoff current	$I_{CE0}$	$V_{CE} = -10 \text{ V}, I_B = 0$			-100	$\mu\text{A}$
Emitter-base cutoff current	$I_{EB0}$	$V_{EB} = -5 \text{ V}, I_c = 0$			-10	$\mu\text{A}$
Forward current transfer ratio	$h_{FE}$	$V_{CE} = -5 \text{ V}, I_c = -1 \text{ A}$	80		220	V
		$V_{CE} = -5 \text{ V}, I_c = -1 \text{ mA}$	10			V
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -1.5 \text{ A}, I_B = -0.15 \text{ A}$			-1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_c = -2 \text{ A}, I_B = -0.2 \text{ A}$			-1.5	V
Transition frequency	$f_T$	$V_{CE} = -5 \text{ V}, I_c = -0.5 \text{ A}, f = 200 \text{ MHz}$		150		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -20 \text{ V}, I_E = 0, f = 1.0 \text{ MHz}$		45		pF

■  $h_{FE}$  Classification

Rank	Q	R
$h_{FE}$	80~160	120~220