

## Silicon PNP Epitaxial Planar Type

## 2SB967

## ■ Features

- Possible to solder the radiation fin directly to printed circuit board.
- Low collector-emitter saturation voltage  $V_{CE(sat)}$ .
- Large collector current  $I_c$ .

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-27	V
Collector-emitter voltage	$V_{CE0}$	-18	V
Emitter-base voltage	$V_{EB0}$	-7	V
Collector current	$I_c$	-5	A
Peak collector current	$I_{CP}$	-8	A
Collector power dissipation	$P_c$	20	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 cutoff current	$I_{CB0}$	$V_{CB} = -10\text{ V}, I_E = 0$			-100	nA
Emitter-base cutoff current	$I_{EB0}$	$V_{EB} = -5\text{ V}, I_c = 0$			-1	$\mu\text{A}$
Collector-emitter voltage	$V_{CE0}$	$I_c = -1\text{ mA}, I_B = 0$	-18			V
Emitter-base voltage	$V_{EB0}$	$I_E = -10\ \mu\text{A}, I_c = 0$	-7			V
Forward current transfer ratio	$h_{FE}$	$V_{CE} = -2\text{ V}, I_c = 2\text{ A}$	90		625	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -3\text{ A}, I_B = -0.1\text{ A}$			-1	V
Transition frequency	$f_T$	$V_{CE} = -6\text{ V}, I_E = -50\text{ mA}, f = 200\text{ MHz}$		120		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -20\text{ V}, I_E = 0, f = 1.0\text{ MHz}$			85	pF

■  $h_{FE}$  Classification

Rank	P	Q	R
$h_{FE}$	90~135	125~205	180~625