

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	μA
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