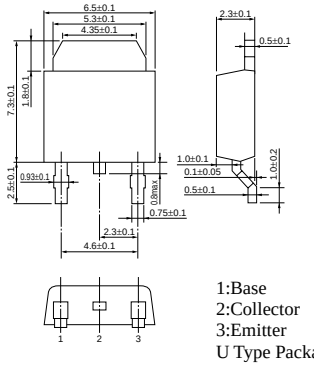
2SB967

Silicon PNP epitaxial planar type

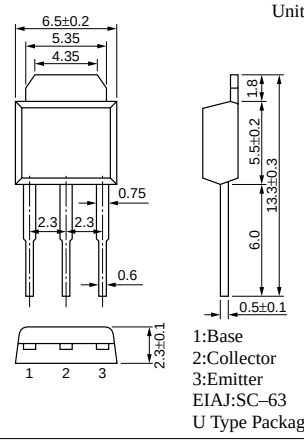
For low-frequency power amplification

Unit: mm



1:Base
2:Collector
3:Emitter
U Type Package

Unit: mm



1:Base
2:Collector
3:Emitter
EIAJ:SC–63
U Type Package (Z)

Features

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

Absolute Maximum Ratings (Ta=25˚C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	–27	V
Collector to emitter voltage	V_{CEO}	–18	V
Emitter to base voltage	V_{EBO}	–7	V
Peak collector current	I_{CP}	–8	A
Collector current	I_C	–5	A
Collector power dissipation (T_C=25°C)	P_C	20	W
Junction temperature	T_j	150	˚C
Storage temperature	T_{stg}	–55 to +150	˚C

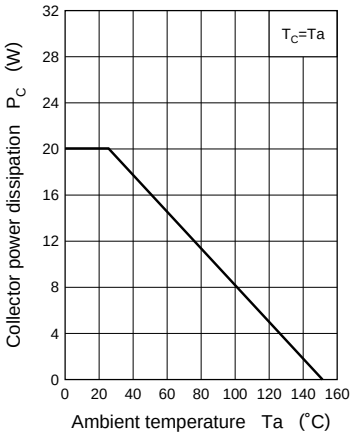
Electrical Characteristics (T_C=25˚C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = –10V, I_E = 0			–100	nA
Emitter cutoff current	I_{EBO}	V_{EB} = –5V, I_C = 0			–1	μA
Collector to emitter voltage	V_{CEO}	I_C = –1mA, I_B = 0	–18			V
Emitter to base voltage	V_{EBO}	I_E = –10μA, I_C = 0	–7			V
Forward current transfer ratio	h_{FE}*	V_{CE} = –2V, I_C = –2A	90		625	
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = –3A, I_B = – 0.1A			–1	V
Transition frequency	f_T	V_{CB} = –6V, I_E = 50mA, f = 200MHz		120		MHz
Collector output capacitance	C_{ob}	V_{CB} = –20V, I_E = 0, f = 1MHz			85	pF

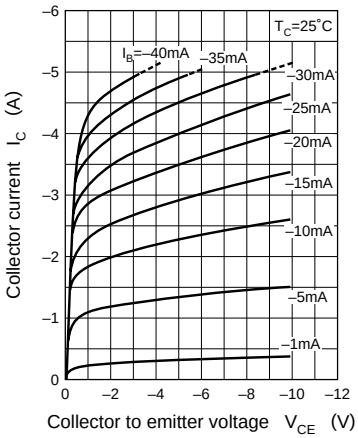
*h_{FE} Rank classification

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

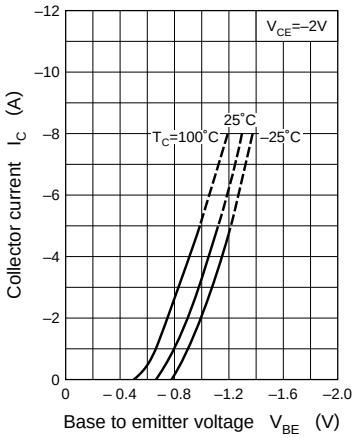
P_C — Ta



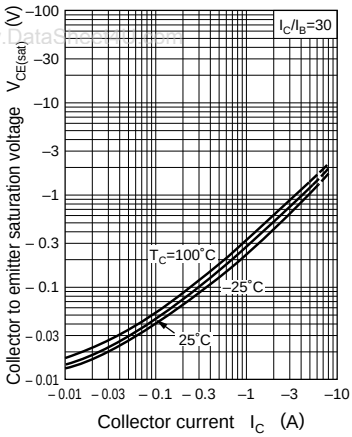
I_C — V_{CE}



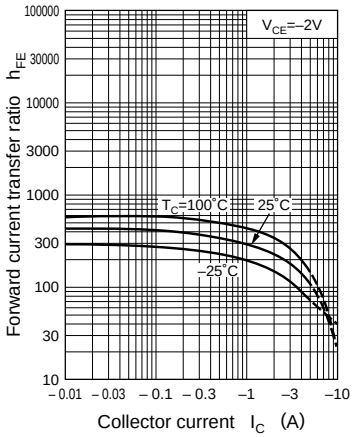
I_C — V_{BE}



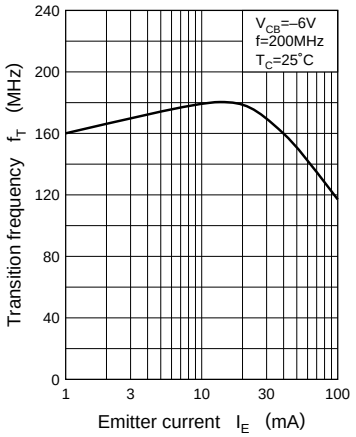
$V_{CE(sat)}$ — I_C



h_{FE} — I_C



f_T — I_E



C_{ob} — V_{CB}