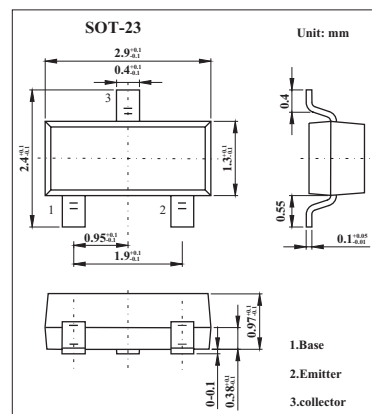


Silicon NPN Epitaxial Planar Type

2SC3547B



■ Features

- Transition frequency is high and dependent on current excellently.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	20	V
Collector-emitter voltage	V_{CEO}	12	V
Emitter-base voltage	V_{EBO}	3	V
Base current	I_B	15	mA
Collector current	I_C	30	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +125	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = 10\text{ V}, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 1\text{ V}, I_C = 0$			1.0	μA
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{ mA}, I_B = 0$	12			V
DC current gain	h_{FE}	$V_{CE} = 10\text{ V}, I_C = 5\text{ mA}$	70		300	
Transition frequency	f_T	$V_{CE} = 10\text{ V}, I_C = 10\text{ mA}$	3	4		GHz
Output capacitance	C_{ob}	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$		1.05	1.35	pF
Collector-base time constant	$C_{c,rb}$	$V_{CB} = 10\text{ V}, I_C = 5\text{ mA}, f = 30\text{ MHz}$		4.5	9	ps

■ Marking

Marking	HM