

2SB1614

Silicon PNP epitaxial planer type

For low-frequency amplification

■ Features

- Large collector power dissipation P_C
- Low collector to emitter saturation voltage $V_{CE(sat)}$
- Mini power type package, allowing downsizing and thinning of the equipment and automatic insertion through the tape packing

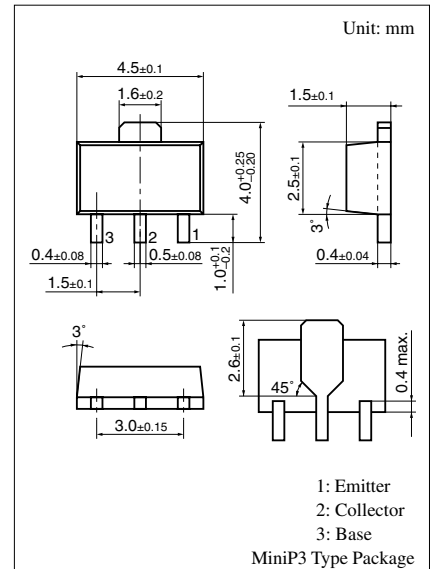
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-20	V
Collector to emitter voltage	V_{CEO}	-20	V
Emitter to base voltage	V_{EBO}	-5	V
Peak collector current	I_{CP}	-2.4	A
Collector current	I_C	-2	A
Collector power dissipation *	P_C	1	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *: Printed circuit board copper foil for collector portion
area: 1.0 Cm^2 or more, thickness: 1.7 mm

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -7\text{ V}, I_E = 0$			-0.1	μA
Collector to base voltage	V_{CBO}	$I_C = -10\ \mu\text{A}, I_E = 0$	-20			V
Collector to emitter voltage	V_{CEO}	$I_C = -1\ \text{mA}, I_B = 0$	-20			V
Emitter to base voltage	V_{EBO}	$I_E = -10\ \mu\text{A}, I_C = 0$	-5			V
Forward current transfer ratio	h_{FE}	$V_{CE} = -2\ \text{V}, I_C = 200\ \text{mA}$	200		800	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1\ \text{A}, I_B = -20\ \text{mA}$		-0.15	-0.25	V
Collector output capacitance	C_{ob}	$V_{CB} = -6\ \text{V}, I_E = 0, f = 1\ \text{MHz}$		68		pF
Transition frequency	f_T	$V_{CB} = -6\ \text{V}, I_E = 50\ \text{mA}, f = 200\ \text{MHz}$		60		MHz



Marking Symbol: 2K