

2SB1679

Silicon PNP epitaxial planer type

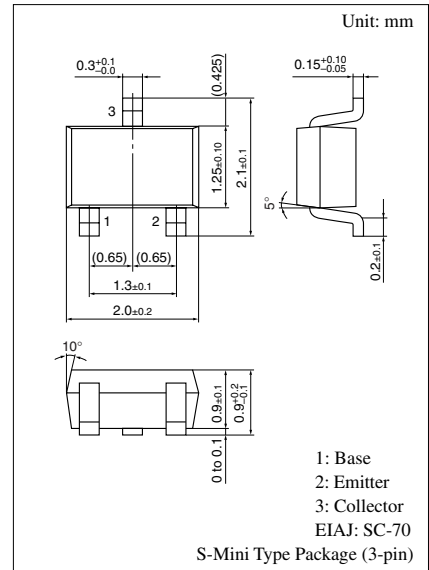
For low-frequency amplification

■ Features

- Large current capacitance
- Low collector to emitter saturation voltage
- Small type package, allowing downsizing and thinning of the equipment.

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CB0}	-15	V
Collector to emitter voltage	V_{CEO}	-10	V
Emitter to base voltage	V_{EBO}	-7	V
Peak collector current	I_{CP}	-0.5	A
Collector current	I_C	-1	A
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



Marking Symbol: 3V

■ 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}	$V_{CB} = -10\text{ V}, I_E = 0$			-100	nA
Collector to base voltage	V_{CB0}	$I_C = -10\ \mu\text{A}, I_E = 0$	-15			V
Collector to emitter voltage	V_{CEO}	$I_C = -1\ \text{mA}, I_B = 0$	-10			V
Emitter to base voltage	V_{EBO}	$I_E = -10\ \mu\text{A}, I_C = 0$	-7			V
Forward current transfer ratio *1	h_{FE1} *2	$V_{CE} = -2\ \text{V}, I_C = -0.5\ \text{A}$	130		350	
	h_{FE2}	$V_{CE} = -2\ \text{V}, I_C = -1\ \text{A}$	60			
Collector to emitter saturation voltage *1	$V_{CE(sat)}$	$I_C = -0.4\ \text{A}, I_B = -8\ \text{mA}$		-0.16	-0.3	V
Base to emitter saturation voltage *1	$V_{BE(sat)}$	$I_C = -0.4\ \text{A}, I_B = -8\ \text{mA}$		-0.8	-1.2	V
Transition frequency	f_T	$V_{CB} = -10\ \text{V}, I_E = 50\ \text{mA}, f = 200\ \text{MHz}$		130		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\ \text{V}, I_E = 0, f = 1\ \text{MHz}$		22		pF

Note) *1: Pulse measurement

*2: Rank classification

Rank	R	S
h_{FE1}	130 to 220	180 to 350