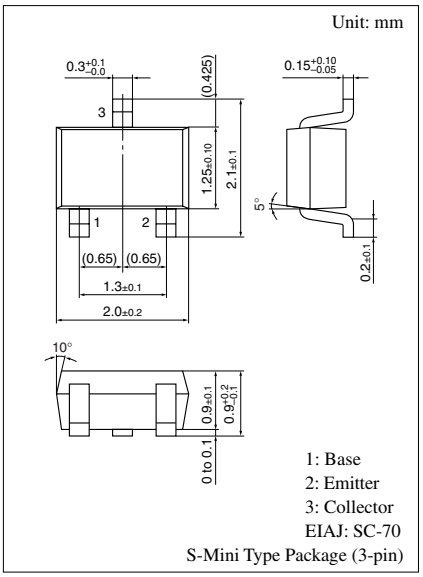
2SB1679

Silicon PNP epitaxial planer type

For low-frequency amplification



Marking Symbol: 3V

■ Features

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

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	−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	°C
Storage temperature	T_{stg}	−55 to +150	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

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

Note) ∗1: Pulse measurement

∗2: Rank classification

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

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