

2SC5632

Silicon NPN epitaxial planar type

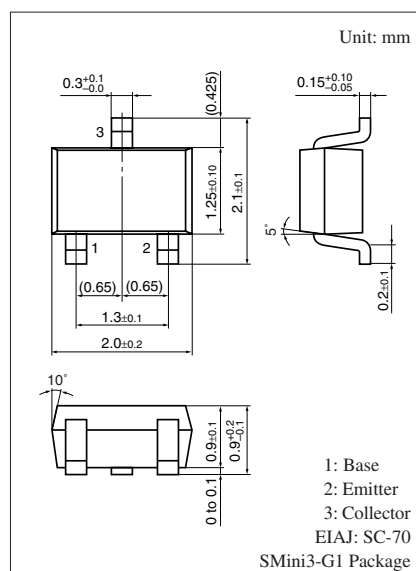
For high-frequency amplification and switching

■ Features

- High transition frequency f_T
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	15	V
Collector-emitter voltage (Base open)	V_{CEO}	8	V
Emitter-base voltage (Collector open)	V_{EBO}	3	V
Collector current	I_C	50	mA
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: 2R

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 100\ \mu\text{A}$, $I_E = 0$	15			V
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 2\ \text{V}$, $I_C = 0$			2	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = 4\ \text{V}$, $I_C = 2\ \text{mA}$	100		350	—
h_{FE} ratio *	Δh_{FE}	h_{FE2} : $V_{CE} = 4\ \text{V}$, $I_C = 100\ \mu\text{A}$	0.6		1.5	—
		h_{FE1} : $V_{CE} = 4\ \text{V}$, $I_C = 2\ \text{mA}$				
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 20\ \text{mA}$, $I_B = 4\ \text{mA}$			0.1	V
Transition frequency	f_T	$V_{CE} = 5\ \text{V}$, $I_C = 15\ \text{mA}$, $f = 200\ \text{MHz}$	0.6	1.1		GHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = 10\ \text{V}$, $I_E = 0$, $f = 1\ \text{MHz}$		1.0	1.6	pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: $\Delta h_{FE} = h_{FE2} / h_{FE1}$

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