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## 2SC5632

### Silicon NPN epitaxial planar type

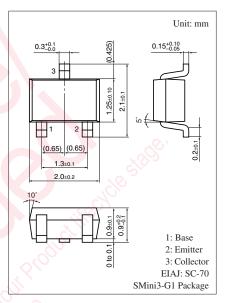
For high-frequency amplification and switching

#### ■ Features

- High transition frequency f<sub>T</sub>
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

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

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	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	°C ,	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	



Marking Symbol: 2R

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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = 100 \mu\text{A},  I_E = 0$	15	0,		V
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = 2 \text{ V}, I_C = 0$		<i>)</i> -	2	μΑ
Forward current transfer ratio	h <sub>FE</sub>	$V_{CE} = 4 \text{ V}, I_C = 2 \text{ mA}$	100		350	_
h <sub>FE</sub> ratio *	$\Delta h_{FE}$	$h_{FE2}$ : $V_{CE} = 4 \text{ V}$ , $I_{C} = 100 \mu\text{A}$	0.6		1.5	_
		$h_{FEI}$ : $V_{CE} = 4 \text{ V}$ , $I_C = 2 \text{ mA}$				
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = 20 \text{ mA}, I_B = 4 \text{ mA}$			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	C <sub>ob</sub>	$V_{CB} = 10 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$		1.0	1.6	pF
(Common base, input open circuited)		See Hill.				

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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