2SC5632G

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

■ Package

- Code
  SMini3-F2
- Marking Symbol: 2R
- Pin Name
  1: Base
  2: Emitter
  3: Collector

■ Absolute Maximum Ratings $T_a = 25°C$

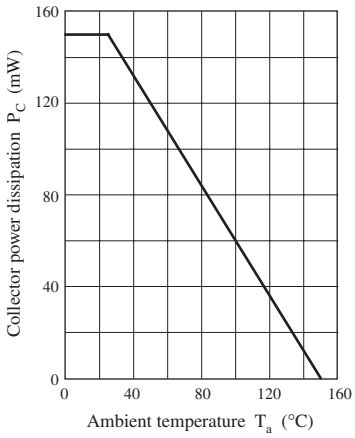
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	15	V
Collector-emitter voltage (Base open)	V_{CEO}	8	V
Emitter-base voltage (Collector open)	V_{EBO}	3	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

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

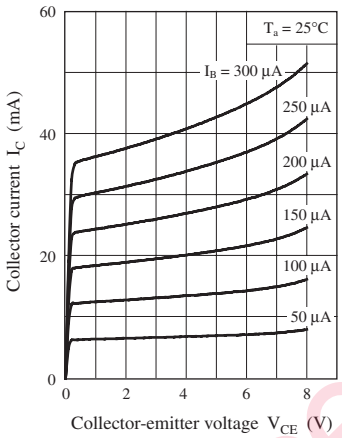
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 100\ \mu A$, $I_E = 0$	15			V
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 2$ V, $I_C = 0$			2	µA
Forward current transfer ratio	h_{FE}	$V_{CE} = 4$ V, $I_C = 2$ mA	100		350	—
h_{FE} ratio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

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.
2. *: $\Delta h_{FE} = h_{FE2} / h_{FE1}$

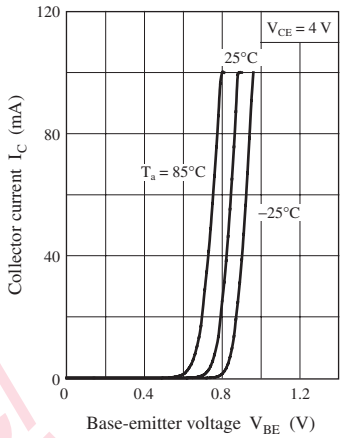
P_C — T_a



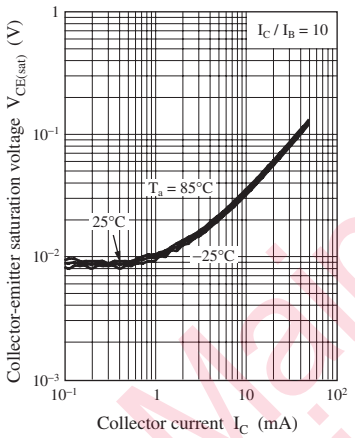
I_C — V_{CE}



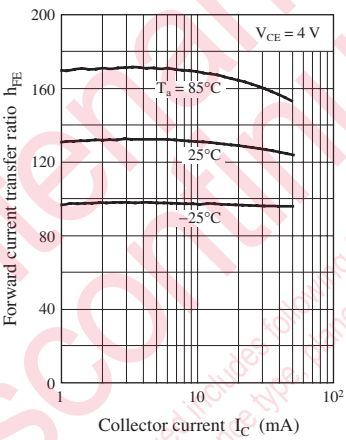
I_C — V_{BE}



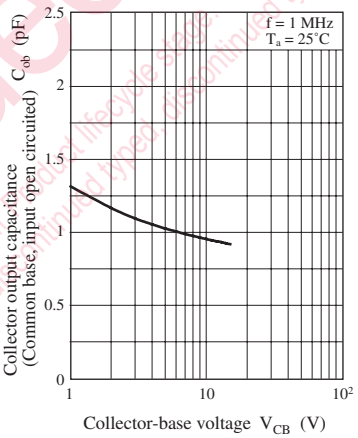
$V_{CE(sat)}$ — I_C



h_{FE} — I_C

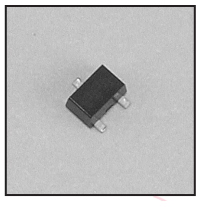


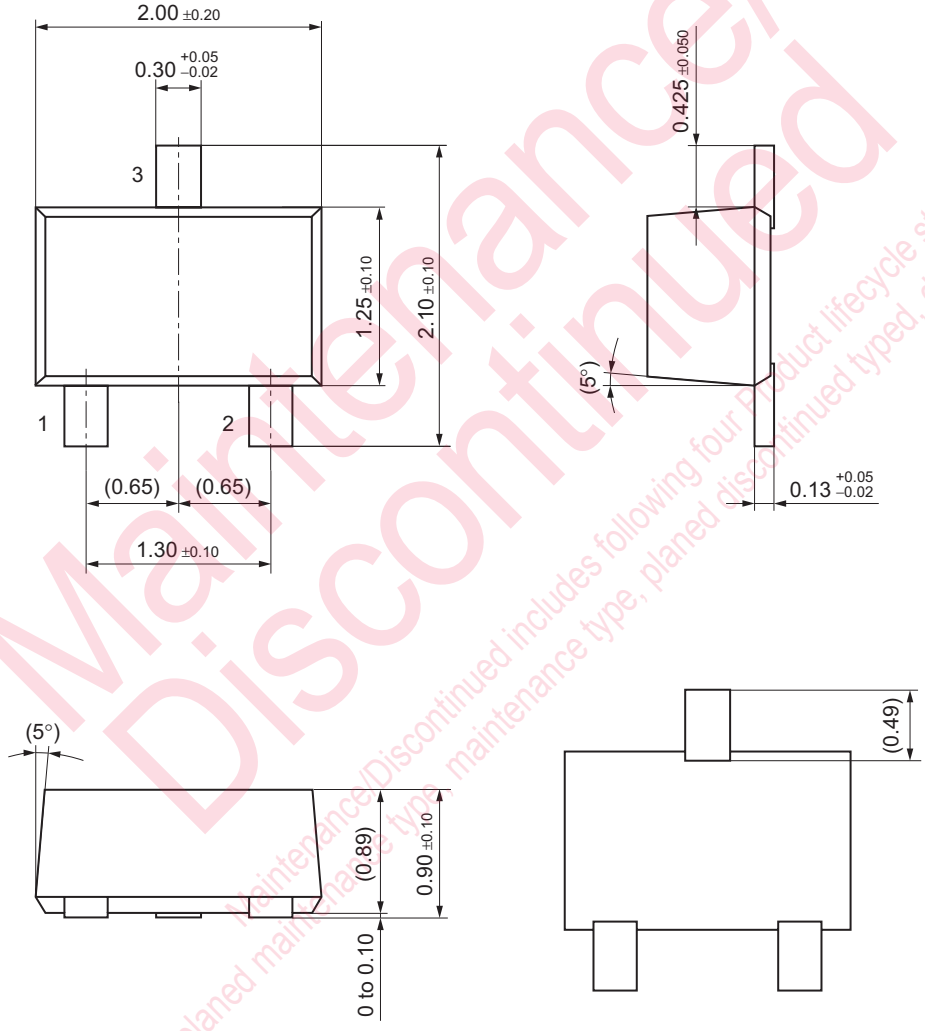
C_{ob} — V_{CB}



SMini3-F2

Unit: mm





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