2SC6036G

Silicon NPN epitaxial planar type

For general amplification
Complementary to 2SA2162G

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- SSS-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

■ Package

- Code
  SSSMini3-F2
- Marking Symbol: 4U
- Pin Name
  1: Base
  2: Emitter
  3: Collector

■ Absolute Maximum Ratings $T_a = 25°C$

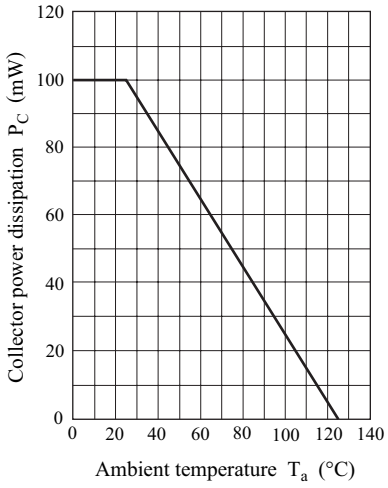
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	15	V
Collector-emitter voltage (Base open)	V_{CEO}	12	V
Emitter-base voltage (Collector open)	V_{EBO}	5	V
Collector current	I_C	500	mA
Peak collector current	I_{CP}	1	A
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	–55 to +125	°C

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

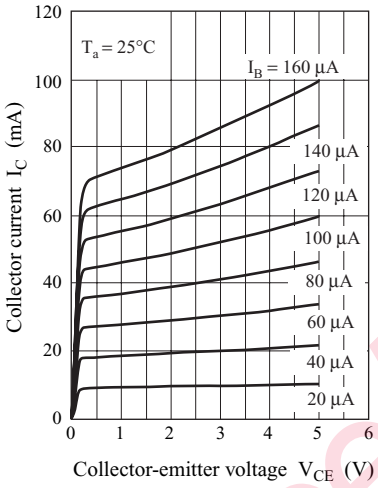
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 10\ \mu A$, $I_E = 0$	15			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 1$ mA, $I_B = 0$	12			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 10\ \mu A$, $I_C = 0$	5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 10$ V, $I_E = 0$			0.1	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = 2$ V, $I_C = 10$ mA	270		680	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 200$ mA, $I_B = 10$ mA			250	mV
Transition frequency	f_T	$V_{CB} = 2$ V, $I_E = -10$ mA, f = 200 MHz		200		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = 10$ V, f = 1 MHz		4.5		pF

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

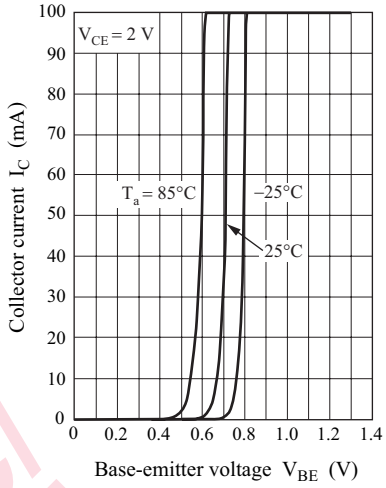
P_C — T_a



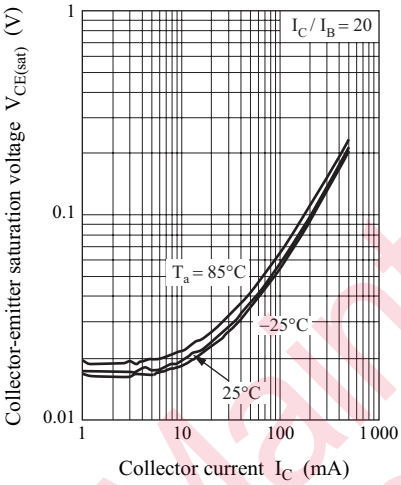
I_C — V_{CE}



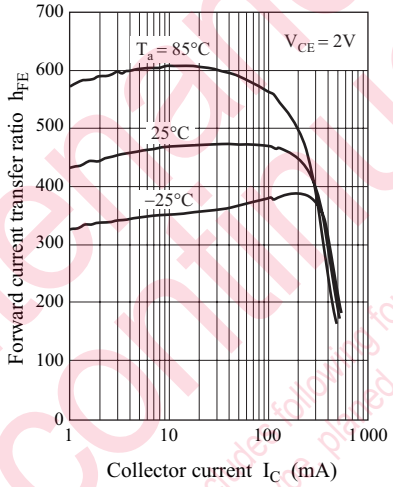
I_C — V_{BE}



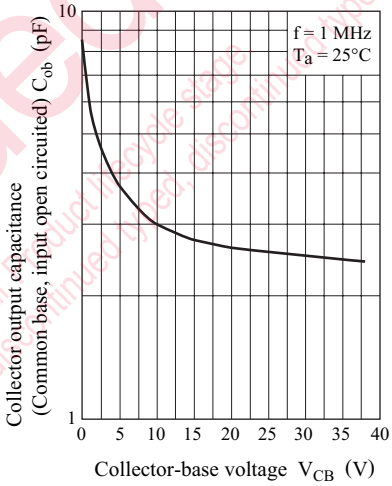
$V_{CE(sat)}$ — I_C



h_{FE} — I_C

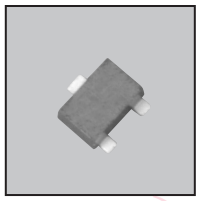


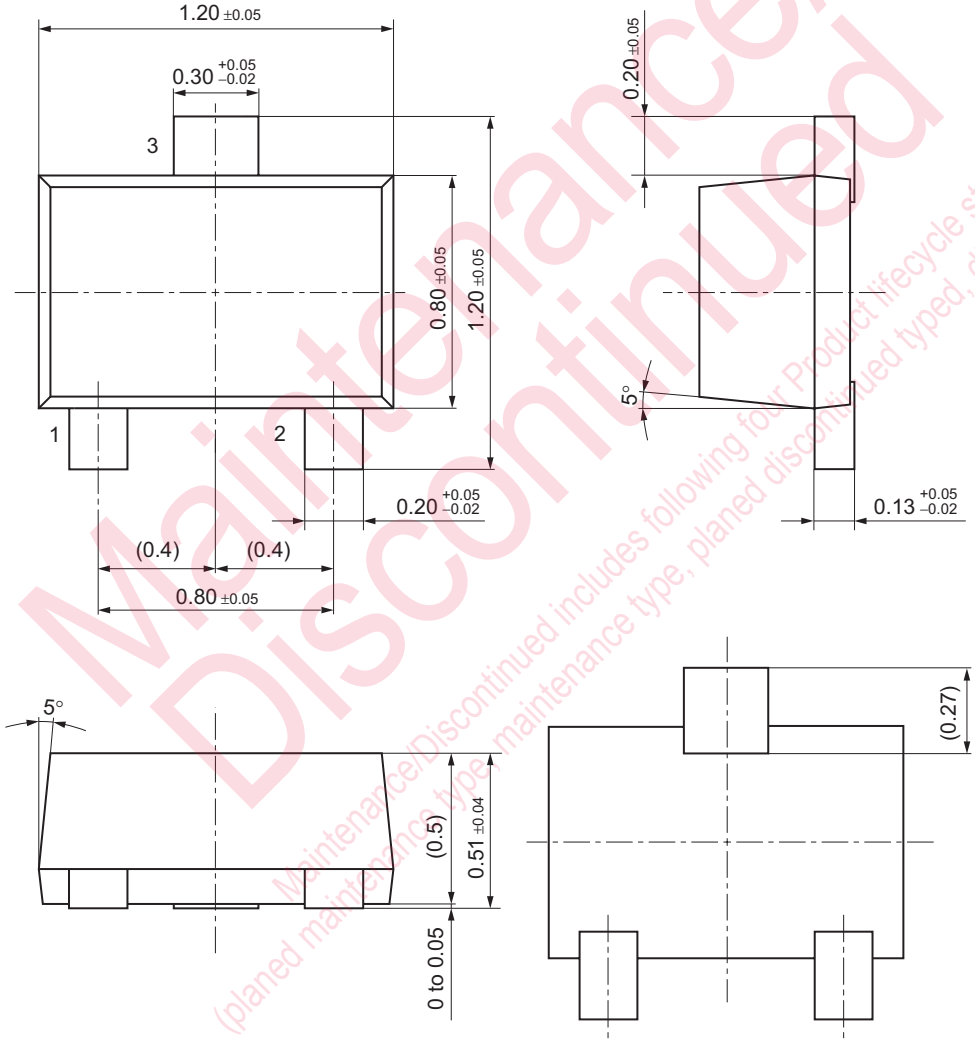
C_{ob} — V_{CB}



SSSMini3-F2

Unit: mm





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