

# 2SC6037J

## Silicon NPN epitaxial planar type

For general amplification

Complementary to 2SA2161J

### ■ Features

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

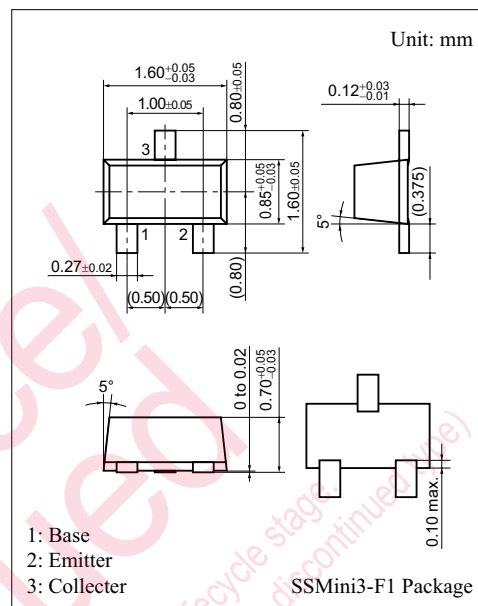
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	15	V
Collector-emitter voltage (Base open)	$V_{CEO}$	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	$P_C$	125	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

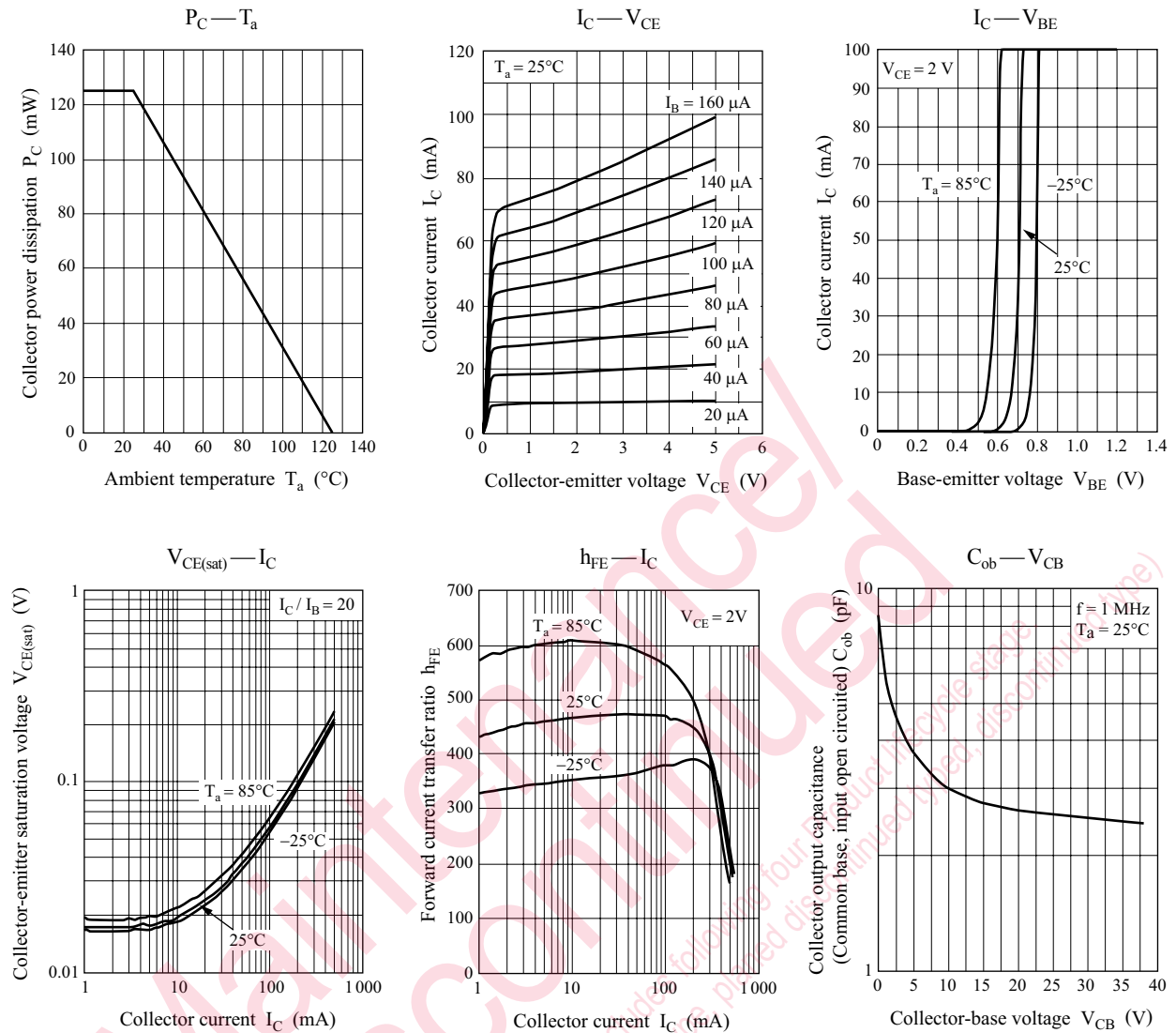
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

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

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



Marking Symbol : 4U



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