Transistors Panasonic

# 2SC6037J

## Silicon NPN epitaxial planar type

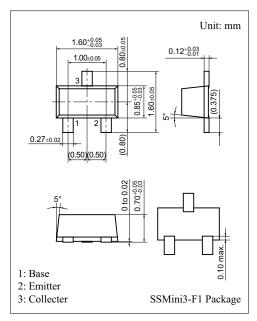
For general amplification Complementary to 2SA2161J

#### ■ Features

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

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	15	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	12	V	
Emitter-base voltage (Collector open)	$V_{EBO}$	5	V	
Collector current	$I_{C}$	500	mA	
Peak collector current	I <sub>CP</sub>	1	A	
Collector power dissipation	P <sub>C</sub>	125	mW	
Junction temperature	T <sub>j</sub>	125	°C	
Storage temperature	T <sub>stg</sub>	-55 to +125	°C	



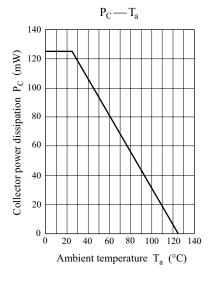
Marking Symbol: 4U

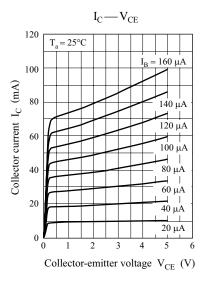
### ■ Electrical Characteristics $T_a = 25$ °C±3°C

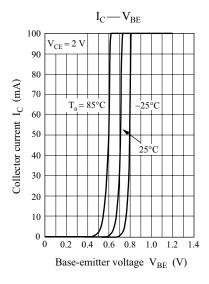
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	$I_{\rm C} = 10  \mu A, I_{\rm E} = 0$	15			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_{\rm C} = 1 \text{ mA}, I_{\rm B} = 0$	12			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 10 \mu A, I_C = 0$	5			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 10 \text{ V}, I_{E} = 0$			0.1	μΑ
Forward current transfer ratio	$h_{FE}$	$V_{CE} = 2 \text{ V}, I_{C} = 10 \text{ mA}$	270		680	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = 200 \text{ mA}, I_B = 10 \text{ mA}$			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 <sub>ob</sub>	$V_{CB} = 10 \text{ V, } f = 1 \text{ MHz}$		4.5		pF

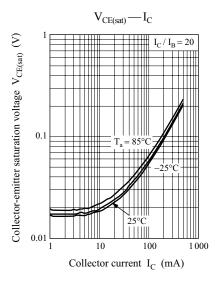
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

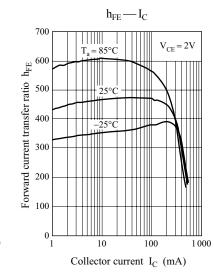
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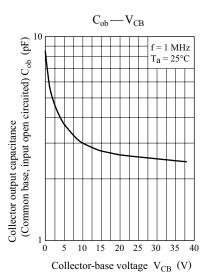












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