# 2SC4656G

## Silicon NPN epitaxial planar type

For high-frequency amplification Complementary to 2SA1791G

#### ■ Features

- High transition frequency f<sub>T</sub>
- $\bullet$  Small collector output capacitance (Common base, input open circuited)  $C_{ob}$
- 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>	50	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	50	V	
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	5	V	
Collector current	$I_C$	50	mA	
Collector power dissipation	P <sub>C</sub>	125	mW	
Junction temperature	$T_{j}$	125	°C	
Storage temperature	$T_{stg}$	-55 to +125	°C	

### ■ Package

Code

SSMini3-F3

- Marking Symbol: AM
- Pin Name
  - 1. Base
  - 2. Emitter
  - 3. Collector

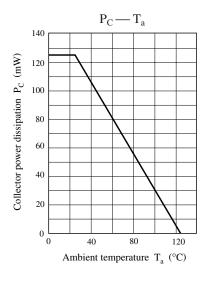
## $\blacksquare$ Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

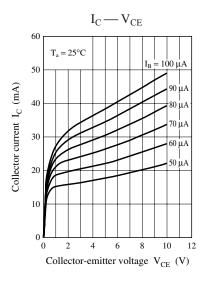
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	$I_C = 10 \ \mu A, I_E = 0$	50			V
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = 1 \text{ mA}, I_B = 0$	50			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 10 \ \mu A, I_C = 0$	5			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 10 \text{ V}, I_{E} = 0$			0.1	μΑ
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = 10 \text{ V}, I_{B} = 0$			100	μΑ
Forward current transfer ratio *	h <sub>FE</sub>	$V_{CE} = 10 \text{ V}, I_{C} = 2 \text{ mA}$	200		500	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_{\rm C} = 10 \text{ mA}, I_{\rm B} = 1 \text{ mA}$		0.06	0.3	V
Transition frequency	$f_T$	$V_{CB} = 10 \text{ V}, I_E = -2 \text{ mA}, f = 200 \text{ MHz}$		250		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = 10 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$		1.5		pF
(Common base, input open circuited)						

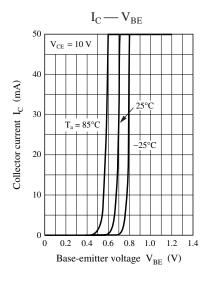
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

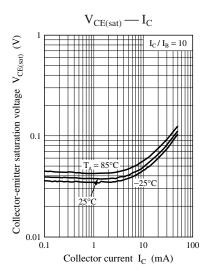
#### 2. \*: Rank classification

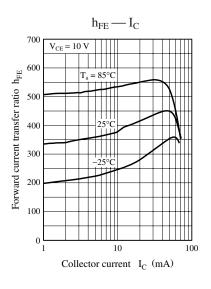
Rank	Q	R	
$h_{\mathrm{FE}}$	200 to 400	250 to 500	

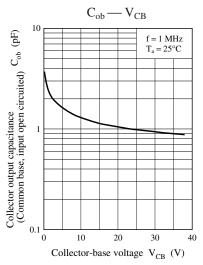






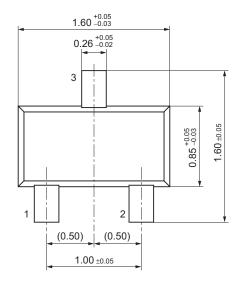


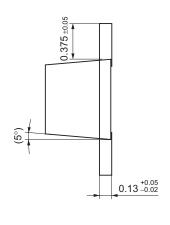


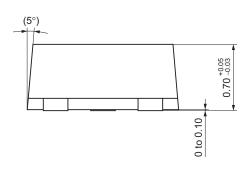


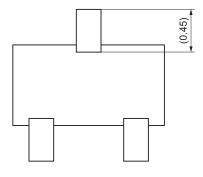
2 SJC00393AED

SSMini3-F3 Unit: mm









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