

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 2SA2078G

### Silicon PNP epitaxial planar type

For general amplification Complementary to 2SC5846G

#### ■ Features

- High forward current transfer ratio h<sub>FE</sub>
- SSS-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

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

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	$V_{CBO}$	-60	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V	
Emitter-base voltage (Collector open)	$V_{EBO}$	-7	V	
Collector current	$I_{C}$	-100	mA	
Peak collector current	$I_{CP}$	-200	mA	
Collector power dissipation	P <sub>C</sub>	100	mW	
Junction temperature	Tj	125	°CO	
Storage temperature	T <sub>stg</sub>	-55 to +125	°C	

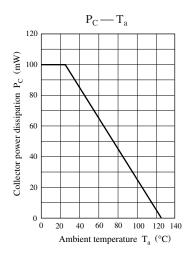
#### Package

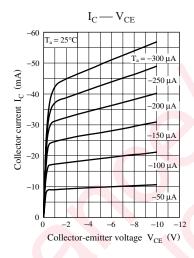
- Code SSSMini3-F2
- Marking Symbol: 7H
- Pin Name
  - 1. Base
  - 2. Emitter
  - 3. Collector

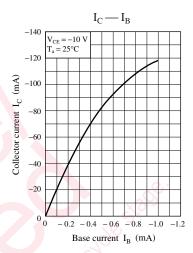
#### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

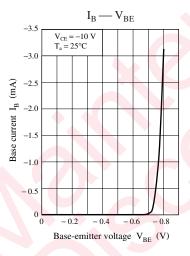
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = -10 \mu A, I_E = 0$	-60			V
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = -100 \mu\text{A},  I_B = 0$	-50			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10 \mu A, I_C = 0$	-7			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -20 \text{ V}, I_E = 0$			- 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	$h_{FE}$	$V_{CE} = -10 \text{ V}, I_{C} = -2 \text{ mA}$	180		390	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$		- 0.2	- 0.5	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		2.2		pF
(Common base, input open circuited)		2, VIII				

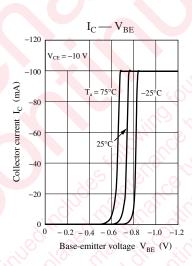
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

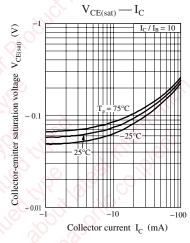


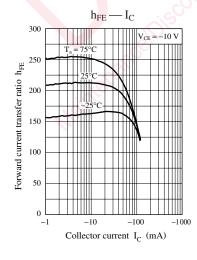


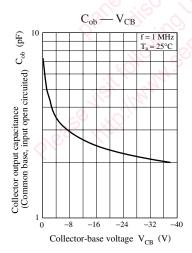




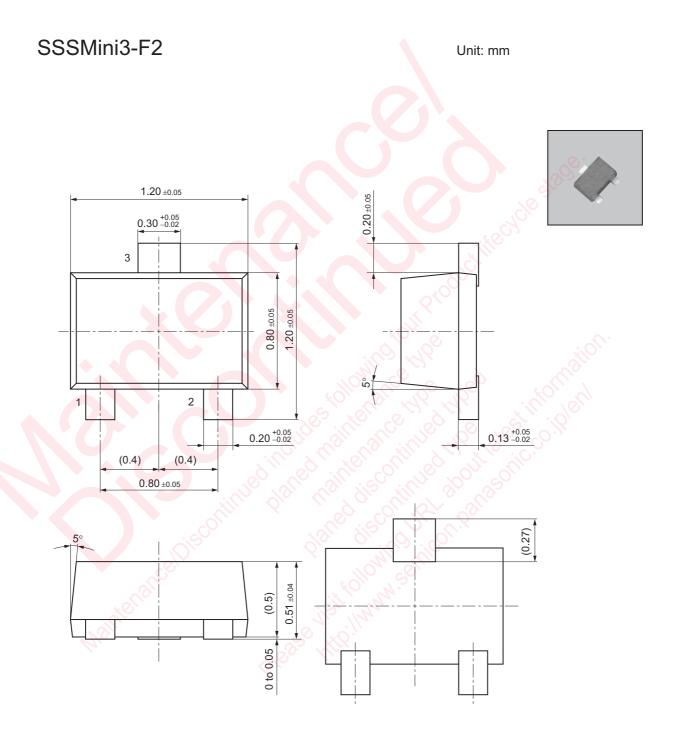








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