Transistors Panasonic

## 2SA2174J

## Silicon PNP epitaxial planar type

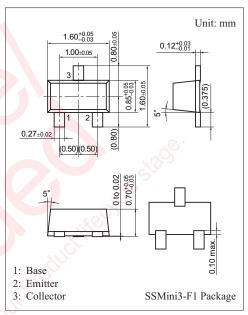
For general amplification Complementary to 2SC6054J

#### ■ Features

- High forward current transfer ratio h<sub>FE</sub>
- 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>	-60	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V	
Emitter-base voltage (Collector open)	$V_{\rm EBO}$	-7	V	
Collector current	$I_{\rm C}$	-100	mA	
Peak collector current	I <sub>CP</sub>	-200	mA	
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	



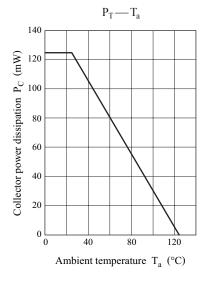
Marking Symbol: 7L

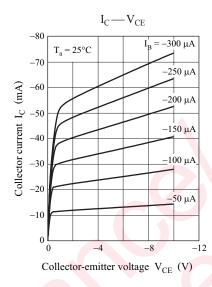
#### ■ Electrical Characteristics $T_a = 25$ °C±3°C

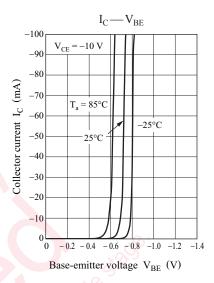
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10 \mu\text{A}, I_{\rm E} = 0$	-60			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Emitter-base voltage (Collector open)	$ m V_{EBO}$	$I_E = -10 \mu\text{A}, I_C = 0$	-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	$h_{\mathrm{FE}}$	$V_{CE} = -10 \text{ V}, I_{C} = -2 \text{ mA}$	160		460	
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 (Common base, input open circuited)	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		2.2		pF

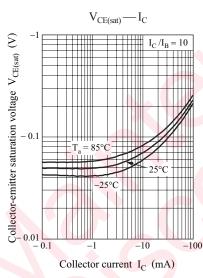
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

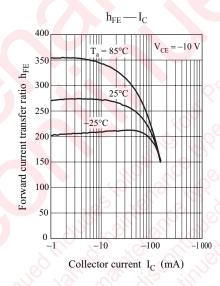
2SA2174J Panasonic

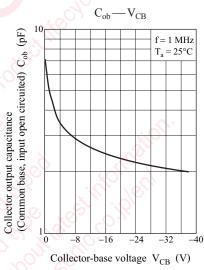












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