



## DRA9114Y0L

Silicon PNP epitaxial planar type

For digital circuits

Complementary to DRC9114Y

DRA5114Y in SSMini3 type package

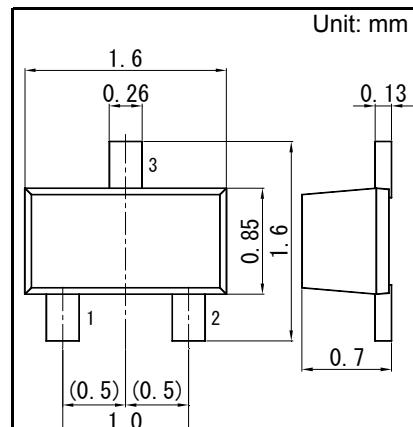
### ■ Features

- Low collector-emitter saturation voltage  $V_{ce(sat)}$
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

### ■ Marking Symbol: LC

### ■ Packaging

Embossed type (Thermo-compression sealing) : 3 000 pcs / reel (standard)



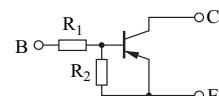
1. Base
2. Emitter
3. Collector

Panasonic	SSMini3-F3-B
JEITA	SC-89
Code	SOT-490

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$VCBO$	-50	V
Collector-emitter voltage (Base open)	$VCEO$	-50	V
Collector current	$IC$	-100	mA
Total power dissipation	$PT$	125	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Operating ambient temperature	$T_{opr}$	-40 to +85	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

### Internal Connection



Resistance value	R1	10	k $\Omega$
	R2	47	k $\Omega$

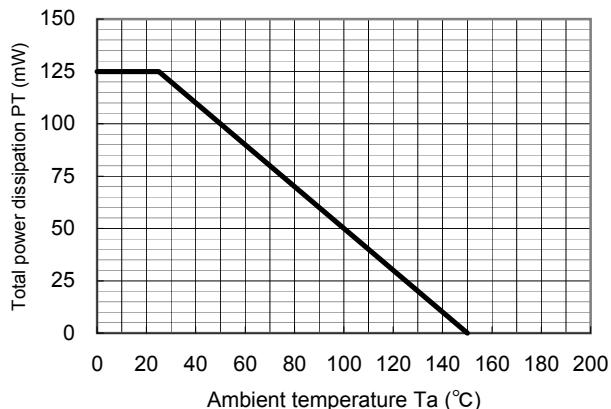
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	$VCBO$	$IC = -10 \mu\text{A}$ , $IE = 0$	-50			V
Collector-emitter voltage (Base open)	$VCEO$	$IC = -2 \text{ mA}$ , $IB = 0$	-50			V
Collector-base cutoff current (Emitter open)	$ICBO$	$VCB = -50 \text{ V}$ , $IE = 0$			-0.1	$\mu\text{A}$
Collector-emitter cutoff current (Base open)	$ICEO$	$VCE = -50 \text{ V}$ , $IB = 0$			-0.5	$\mu\text{A}$
Emitter-base cutoff current (Collector open)	$IEBO$	$VEB = -6 \text{ V}$ , $IC = 0$			-0.2	mA
Forward current transfer ratio	$hFE$	$VCE = -10 \text{ V}$ , $IC = -5 \text{ mA}$	80			-
Collector-emitter saturation voltage	$VCE(sat)$	$IC = -10 \text{ mA}$ , $IB = -0.5 \text{ mA}$			-0.25	V
Input voltage	$Vi(\text{on})$	$VCE = -0.2 \text{ V}$ , $IC = -5 \text{ mA}$	-1.7			V
	$Vi(\text{off})$	$VCE = -5 \text{ V}$ , $IC = -100 \mu\text{A}$			-0.5	V
Input resistance	$R_1$		-30%	10	+30%	k $\Omega$
Resistance ratio	$R_1/R_2$		0.17	0.21	0.25	-

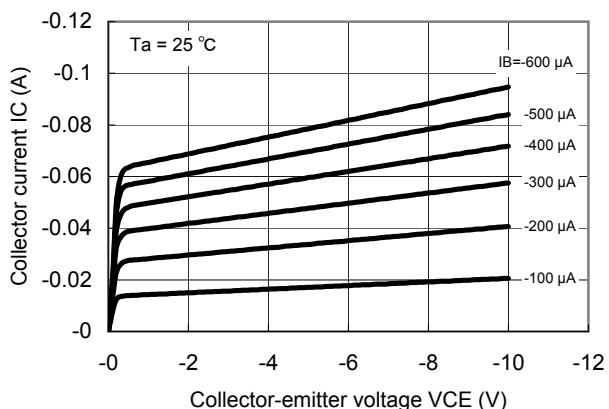
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

Technical Data ( reference )

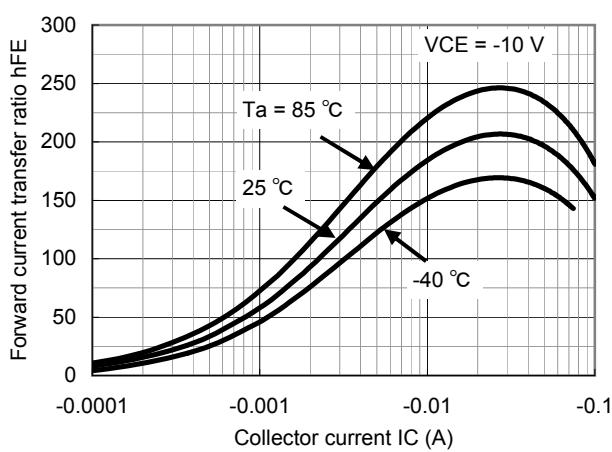
PT - Ta



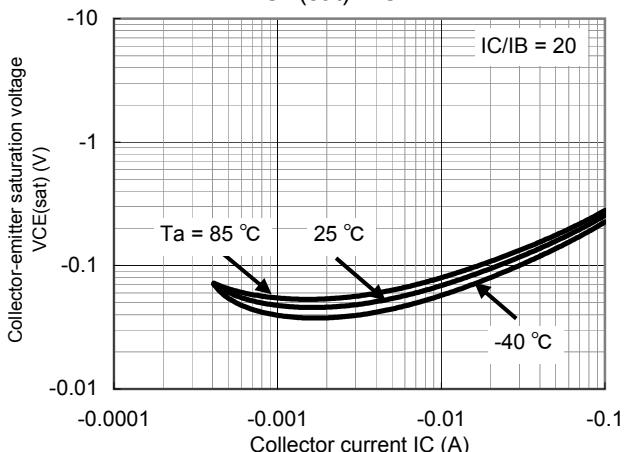
IC - VCE



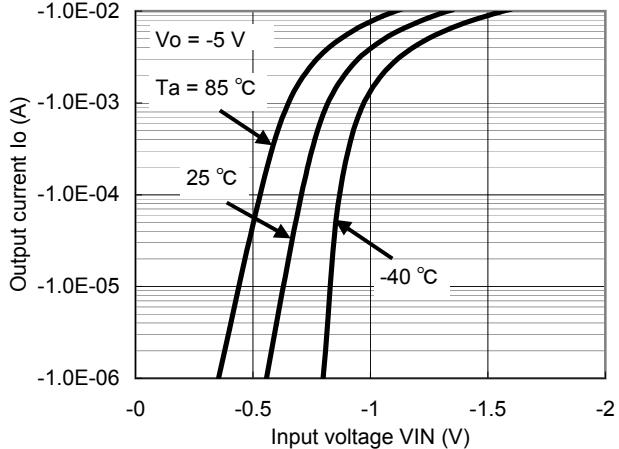
hFE - IC



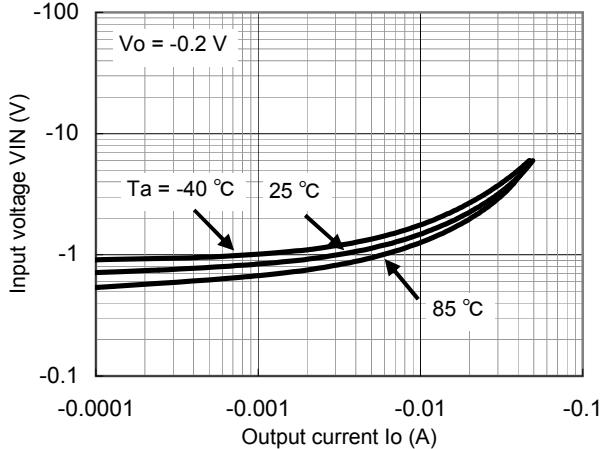
VCE(sat) - IC



Io - VIN



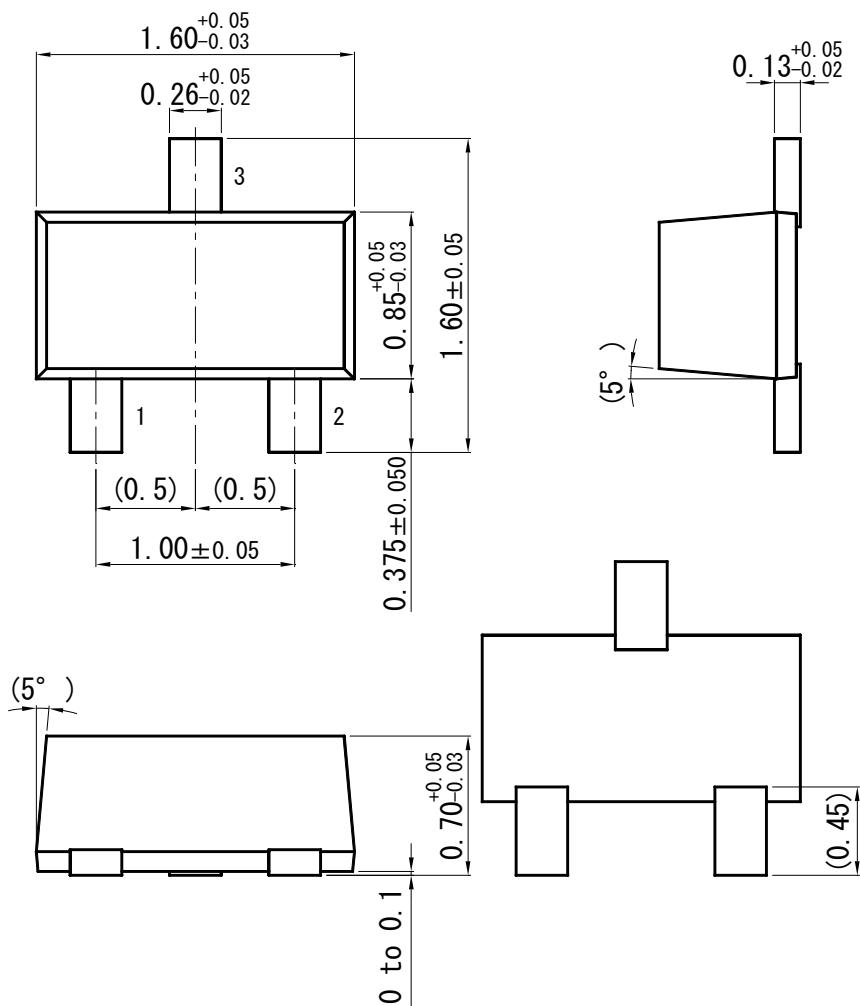
VIN - Io



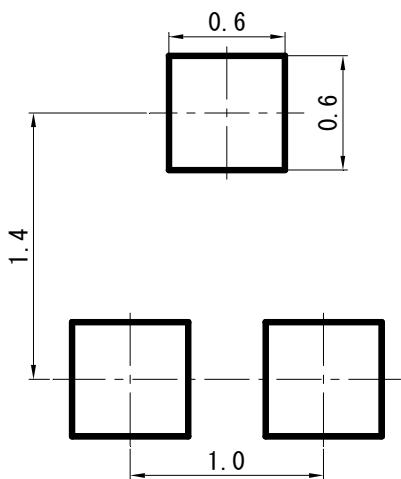
**Panasonic**

**SSMini3-F3-B**

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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