

Transistors with Built-in Resistor DRA3152Z0L

## DRA3152Z0L

Silicon PNP epitaxial planar type

For digital circuits Complementary to DRC3152Z DRA9152Z in SSSMini3 type package

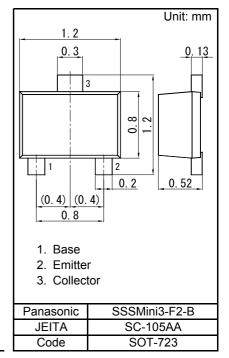
## Features

- Low collector-emitter saturation voltage Vce(sat) ٠
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: L0

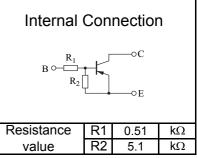
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Packaging

Embossed type (Thermo-compression sealing) : 10 000 pcs / reel (standard)



Parameter	Symbol	Rating	Unit	_
Collector-base voltage (Emitter open)	VCBO	-50	V	
Collector-emitter voltage (Base open)	VCEO	-50	V	Internal Co
Collector current	IC	-100	mA	
Total power dissipation	PT	100	mW	R <sub>1</sub>
Junction temperature	Tj	150	°C	B⊶□+
Operating ambient temperature	Topr	-40 to +85	°C	R <sub>2</sub>
Storage temperature	Tstg	-55 to +150	°C	
				Desistance D



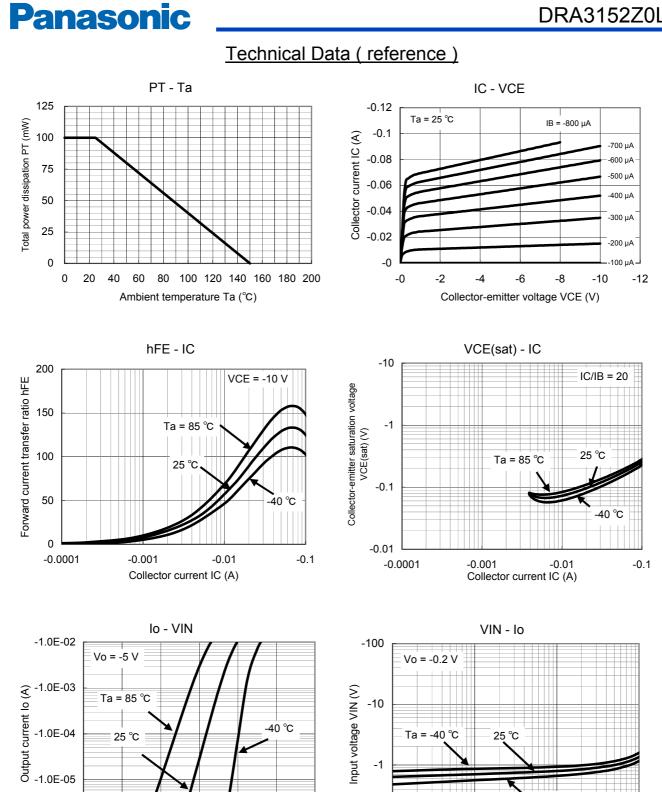
Electrical Characteristics	Ta = 25 °C ± 3 °C
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Absolute Maximum Ratings Ta = 25 °C

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Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	VCBO	IC = -10 μA, IE = 0	-50			V
Collector-emitter voltage (Base open)	VCEO	IC = -2 mA, IB = 0	-50			V
Collector-base cutoff current (Emitter open)	ICBO	VCB = -50 V, IE = 0			-0.1	μA
Collector-emitter cutoff current (Base open)	ICEO	VCE = -50 V, IB = 0			-0.5	μA
Emitter-base cutoff current (Collector open)	IEBO	VEB = -6 V, IC = 0			-2.0	mA
Forward current transfer ratio	hFE	VCE = -10 V, IC = -5 mA	20			-
Collector-emitter saturation voltage	VCE(sat)	IC = -10 mA, IB = -0.5 mA			-0.25	V
Input voltage	Vi(on)	VCE = -0.2 V, IC = -5 mA	-1.0			V
	Vi(off)	VCE = -5 V, IC = -100 μA			-0.4	V
Input resistance	R1		-30%	0.51	+30%	kΩ
Resistance ratio	R1/R2		0.08	0.10	0.12	-
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Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

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-1.0E-06

-0

-0.2

-0.4

-0.6

Input voltage VIN (V)

-0.8

-1

-1.2

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-0.1

-0.0001

-0.1

85 °C

Output current lo (A)

-0.01

-0.001



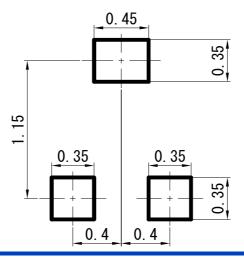
SSSMini3-F2-B

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Unit: mm

## $1.20 \pm 0.05$ 0.13-0.02 **0. 30**<sup>+0. 05</sup> 0. 02 3 0.80±0.05 $1.20\pm0.05$ 20 2 1 **0. 20**+0. 05 -0. 02 $0.20\pm0.05$ (0.4) (0.4) $0.80 \pm 0.05$ (5°) 27) $52\pm0.03$ ġ o' 0 to 0.05

Land Pattern (Reference) (Unit: mm)



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