

Transistors with Built-in Resistor DRA3143Y0L

# DRA3143Y0L Silicon PNP epitaxial planar type

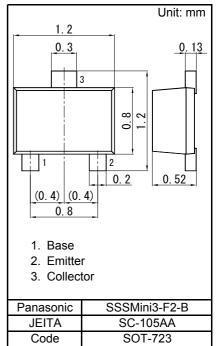
For digital circuits Complementary to DRC3143Y DRA9143Y in SSSMini3 type package

#### Features

- · High forward current transfer ratio Hfe
- Low collector-emitter saturation voltage Vce(sat)
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: L7

### Packaging

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



Internal Connection						
Resistance	R1	4.7	kΩ			
value	R2	22	kΩ			

## ■ Absolute Maximum Ratings Ta = 25 °C

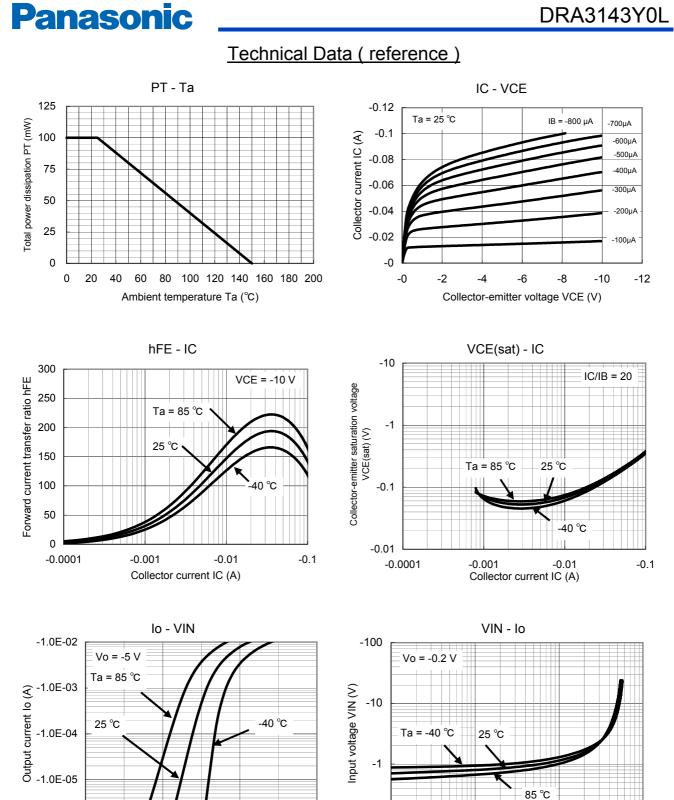
Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	VCBO	-50	V	
Collector-emitter voltage (Base open)	VCEO	-50	V	
Collector current	IC	-100	mA	
Total power dissipation	PT	100	mW	
Junction temperature	Tj	150	°C	
Operating ambient temperature	Topr	-40 to +85	°C	
Storage temperature	Tstg	-55 to +150	С°	

Electrical Characteristics	Ta = 25 °C ± 3 °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			-0.4	mA	
Forward current transfer ratio	hFE	VCE = -10 V, IC = -5 mA	60		200	-	
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	-1.2			V	
	Vi(off)	VCE = -5 V, IC = -100 μA			-0.5	V	
Input resistance	R1		-30%	4.7	+30%	kΩ	
Resistance ratio	R1/R2		0.17	0.21	0.27	-	

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

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-0.1

-0.01

-1.0E-06

-0

-0.5

-1

Input voltage VIN (V)

-1.5

-0.1

-0.0001

-0.001

Output current Io (A)



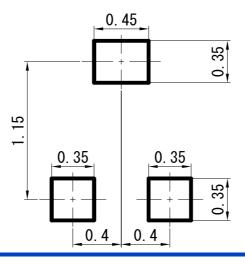
SSSMini3-F2-B

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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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