# imall

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## **Panasonic**

Transistors with Built-in Resistor DRA3143E0L

### **DRA3143E0L** Silicon PNP epitaxial planar type

For digital circuits Complementary to DRC3143E

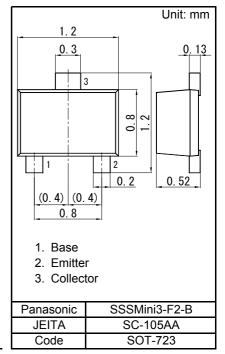
DRA9143E in SSSMini3 type package

#### Features

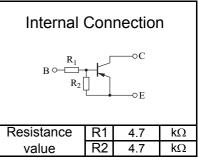
- Low collector-emitter saturation voltage Vce(sat) ٠
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: L5

#### 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	Inter
Collector current	IC	-100	mA	
Total power dissipation	PT	100	mW	
Junction temperature	Tj	150	°C	ВО
Operating ambient temperature	Topr	-40 to +85	°C	
Storage temperature	Tstg	-55 to +150	°C	



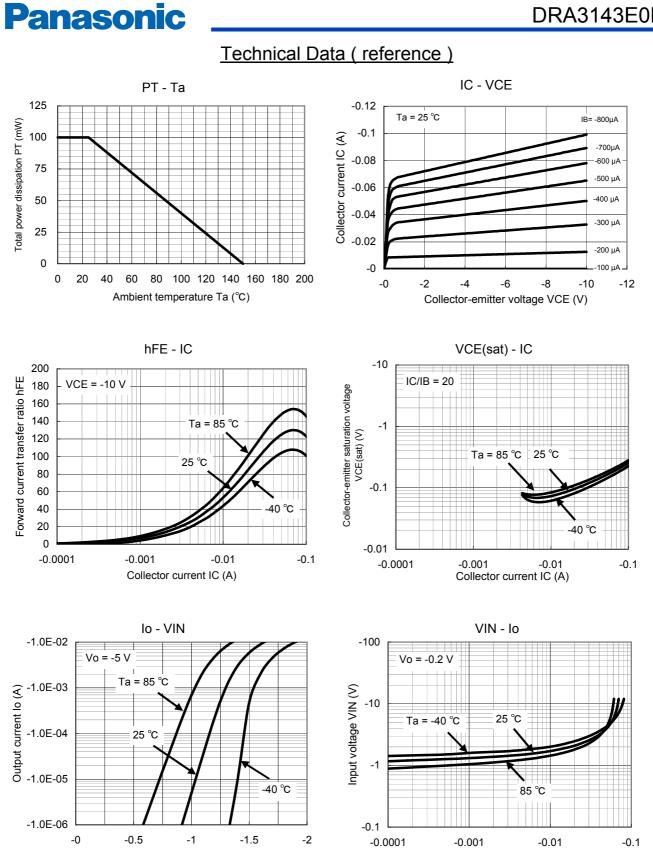
#### ■ Electrical Characteristics Ta = 25 °C ± 3 °C

Absolute Maximum Ratings Ta = 25 °C

Symbol	Conditions	Min	Тур	Max	Unit				
VCBO	IC = -10 μA, IE = 0	-50			V				
VCEO	IC = -2 mA, IB = 0	-50			V				
ICBO	VCB = -50 V, IE = 0			-0.1	μA				
ICEO	VCE = -50 V, IB = 0			-0.5	μA				
IEBO	VEB = -6 V, IC = 0			-2.0	mA				
hFE	VCE = -10 V, IC = -5 mA	20			-				
VCE(sat)	IC = -10 mA, IB = -0.5 mA			-0.25	V				
Vi(on)	VCE = -0.2 V, IC = -5 mA	-1.9			V				
Vi(off)	VCE = -5 V, IC = -100 μA			-0.8	V				
R1		-30%	4.7	+30%	kΩ				
R1/R2		0.8	1.0	1.2	-				
	Symbol VCBO ICBO ICEO IEBO hFE VCE(sat) Vi(on) Vi(off) R1	Symbol Conditions   VCBO IC = -10 $\mu$ A, IE = 0   VCEO IC = -2 mA, IB = 0   ICBO VCB = -50 V, IE = 0   ICEO VCE = -50 V, IB = 0   IEBO VEB = -6 V, IC = 0   hFE VCE = -10 V, IC = -5 mA   VCE(sat) IC = -10 mA, IB = -0.5 mA   Vi(on) VCE = -5 V, IC = -100 $\mu$ A   R1	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $				

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

Transistors with Built-in Resistor **DRA3143E0L** 



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Output current Io (A)

Established : 2009-10-23 Revised : 2014-02-12

Input voltage VIN (V)



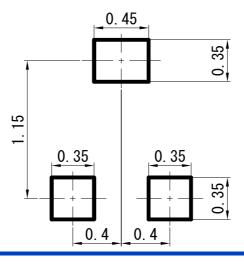
SSSMini3-F2-B

Transistors with Built-in Resistor DRA3143E0L

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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Established : 2009-10-23 Revised : 2014-02-12

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