# imall

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Transistors with Built-in Resistor **DRA9143E0L** 

## **DRA9143E0L** Silicon PNP epitaxial planar type

For digital circuits Complementary to DRC9143E DRA5143E in SSMini3 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

Collector current

Total power dissipation

Operating ambient temperature

Junction temperature

Storage temperature

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

Symbol

VCBO

VCEO

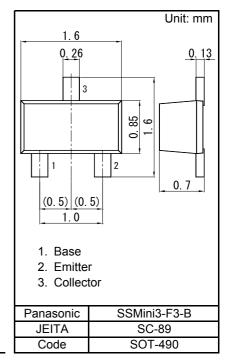
IC

PT

Tj

Topr

Tstg



	Unit	_			
	V		_		
	V	Internal	Con	nectior	ו
	mA				
	mW	$R_1$	Г	OC	
	°C	B O-			
	°C	R <sub>2</sub>		. 5	
0	°C		•	oE	
		Resistance	R1	4.7	kΩ
		value	R2	4.7	kΩ

Absolute Maximum	Ratings	Ta = 25 °C
	· · J ·	

Parameter

Collector-base voltage (Emitter open)

Collector-emitter voltage (Base open)

		-			
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		0.20	V
Input voltage V(cf) 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 = -0.2 V, IC = -5 mA   Vi(off) 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 $

Rating

-50

-50

-100

125

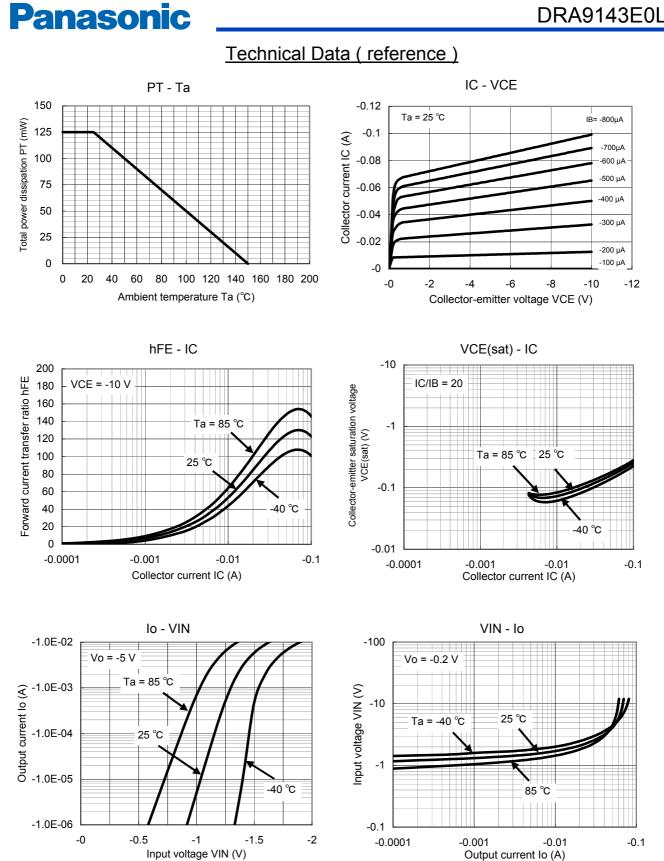
150

-40 to +85

-55 to +15

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

Transistors with Built-in Resistor **DRA9143E0L** 



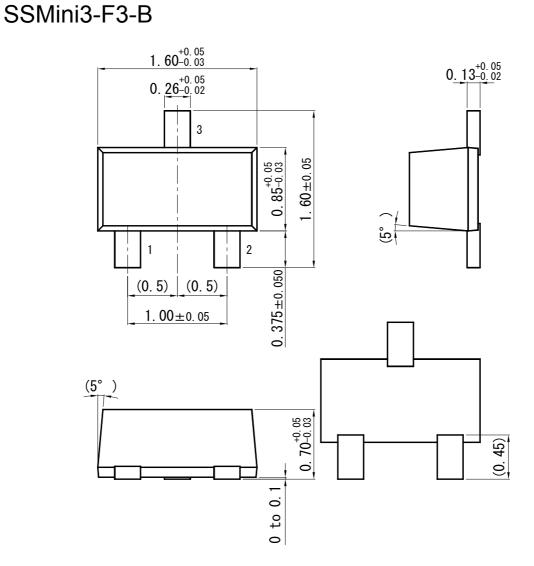
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Established : 2009-10-16 Revised : 2014-02-27

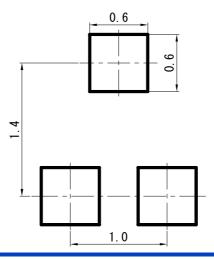


Transistors with Built-in Resistor DRA9143E0L

Unit: mm



Land Pattern (Reference) (Unit: mm)



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