Revision. 3

Transistors with Built-in Resistor

DRC9114E0L

DRC9114E0L

Panasonic

Silicon NPN epitaxial planar type

For digital circuits
Complementary to DRA9114E
DRC5114E in SSMini3 type package

■ Features

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

■ Marking Symbol: NB

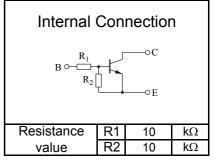
■ Packaging

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

■ 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	125	mW
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	°C

Unit: mm 1.6 0. 26 0, 13 85 0. 7 (0.5)(0.5)1.0 1. Base 2. Emitter 3. Collector SSMini3-F3-B Panasonic JEITA SC-89 Code SOT-490



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

Established: 2009-10-13

: 2014-03-05

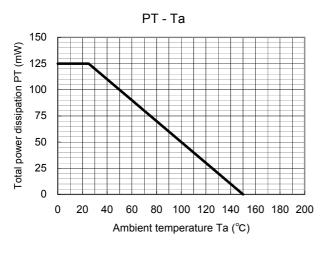
Revised

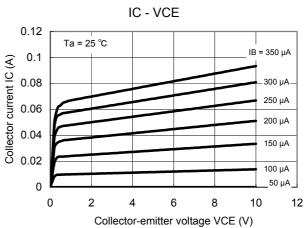
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	VCBO	IC = 10 μA, IE = 0	50			V
Collector-emitter voltage (Base open)	VCEO	IC = 2 mA, IB = 0	50			V
Collector-base cutoff current (Emitter open)	ICBO	VCB = 50 V, IE = 0			0.1	μΑ
Collector-emitter cutoff current (Base open)	ICEO	VCE = 50 V, IB = 0			0.5	μΑ
Emitter-base cutoff current (Collector open)	IEBO	VEB = 6 V, IC = 0			0.5	mA
Forward current transfer ratio	hFE	VCE = 10 V, IC = 5 mA	35			-
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	2.1			V
	Vi(off)	VCE = 5 V, IC = 100 μA			8.0	V
Input resistance	R1		-30%	10	+30%	kΩ
Resistance ratio	R1/R2		0.8	1.0	1.2	-

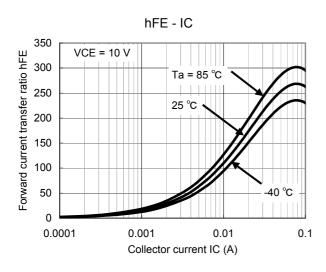
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

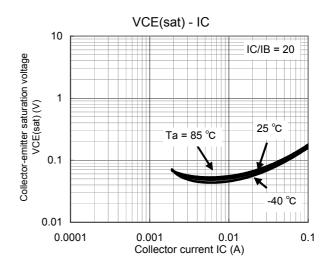
Panasonic

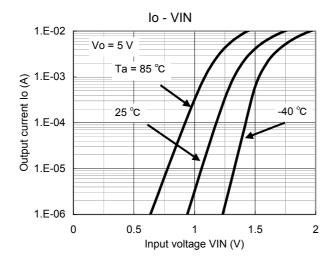
Technical Data (reference)

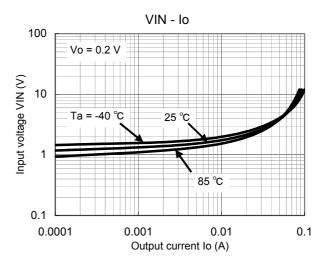












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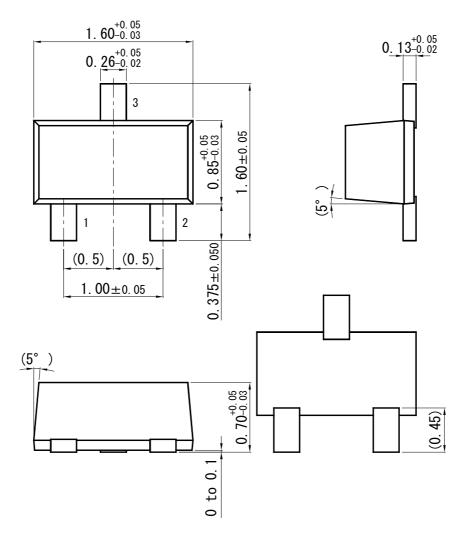
Transistors with Built-in Resistor

DRC9114E0L

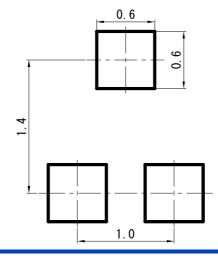
SSMini3-F3-B

Panasonic

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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Established: 2009-10-13 Revised: 2014-03-05

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