

Transistors with Built-in Resistor DRC9143X0L

## DRC9143X0L Silicon NBN opitaxial planar to

Silicon NPN epitaxial planar type

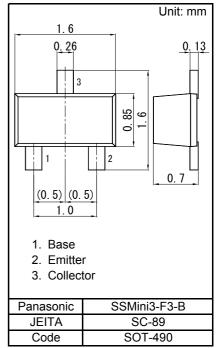
For digital circuits Complementary to DRA9143X DRC5143X in SSMini3 type package

#### Features

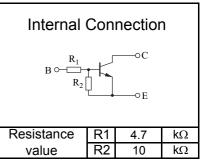
- Low collector-emitter saturation voltage Vce(sat)
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: N6

#### Packaging

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



Symbol	Rating	Unit
VCBO	50	V
VCEO	50	V
IC	100	mA
PT	125	mW
Tj	150	°C
Topr	-40 to +85	°C
Tstg	-55 to +150	°C
	VCBO VCEO IC PT Tj Topr	VCBO 50   VCEO 50   IC 100   PT 125   Tj 150   Topr -40 to +85



### Electrical Characteristics Ta = $25 \circ C \pm 3 \circ C$

■ Absolute Maximum Ratings Ta = 25 °C

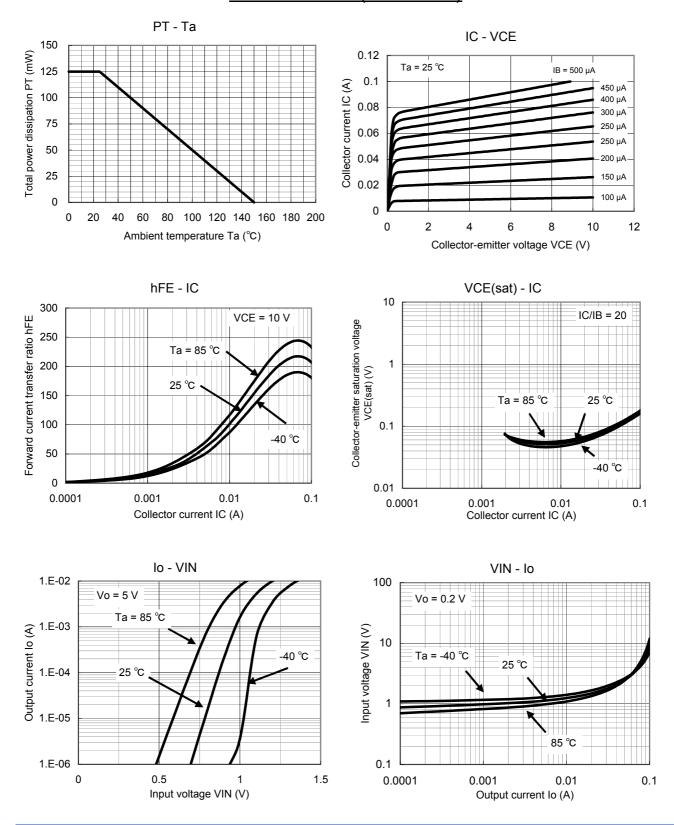
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	VCBO	IC = 10 μA, IE = 0	50			V
Collector-emitter voltage (Base open)	VCEO	IC = 2 mA, IB = 0	50			V
Collector-base cutoff current (Emitter open)	ICBO	VCB = 50 V, IE = 0			0.1	μA
Collector-emitter cutoff current (Base open)	ICEO	VCE = 50 V, IB = 0			0.5	μA
Emitter-base cutoff current (Collector open)	IEBO	VEB = 6 V, IC = 0			1.0	mA
Forward current transfer ratio	hFE	VCE = 10 V, IC = 5 mA	30			-
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	1.7			V
	Vi(off)	VCE = 5 V, IC = 100 µA			0.6	V
Input resistance	R1		-30%	4.7	+30%	kΩ
Resistance ratio	R1/R2		0.37	0.47	0.57	-

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

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Technical Data (reference)

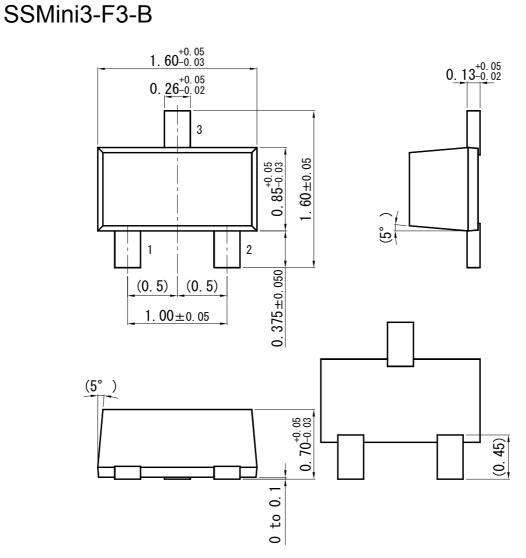


Established : 2009-10-22 Revised : 2014-02-27

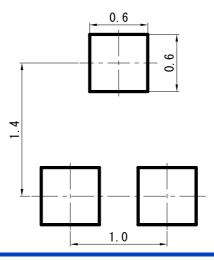


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Unit: mm



Land Pattern (Reference) (Unit: mm)



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