

Panasonic

DRC3143E0L

Silicon NPN epitaxial planar type

For digital circuits

Complementary to DRA3143E

DRC9143E in SSSMini3 type package

■ Features

- Low collector-emitter saturation voltage $V_{ce(sat)}$
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

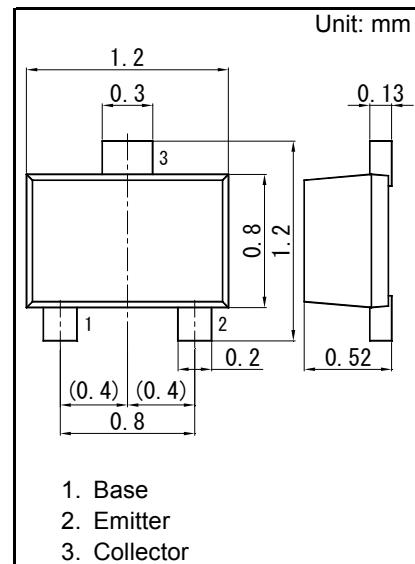
■ Marking Symbol: N5

■ Packaging

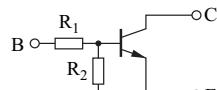
Embossed type (Thermo-compression sealing) : 10 000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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	T _j	150	°C
Operating ambient temperature	T _{opr}	-40 to +85	°C
Storage temperature	T _{stq}	-55 to +150	°C



Panasonic	SSSMini3-F2-B
JEITA	SC-105AA
Code	SOT-723



Resistance value	R1	4.7	kΩ
	R2	4.7	kΩ

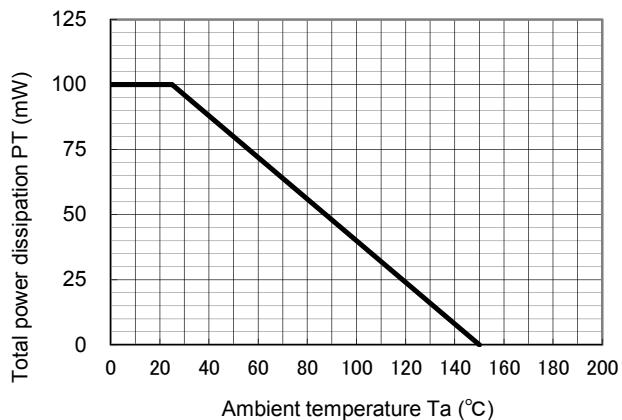
■ Electrical Characteristics $T_a = 25 \text{ }^{\circ}\text{C} \pm 3 \text{ }^{\circ}\text{C}$

Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	VCBO	IC = 10 μ A, 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	μ A
Collector-emitter cutoff current (Base open)	ICEO	VCE = 50 V, IB = 0				0.5	μ A
Emitter-base cutoff current (Collector open)	IEBO	VEB = 6 V, IC = 0				2.0	mA
Forward current transfer ratio	hFE	VCE = 10 V, IC = 5 mA	20				-
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	1.9				V
	Vi(off)	VCE = 5 V, IC = 100 μ A				0.8	V
Input resistance	R1		-30%	4.7	+30%		k Ω
Resistance ratio	R1/R2		0.8	1.0	1.2		-

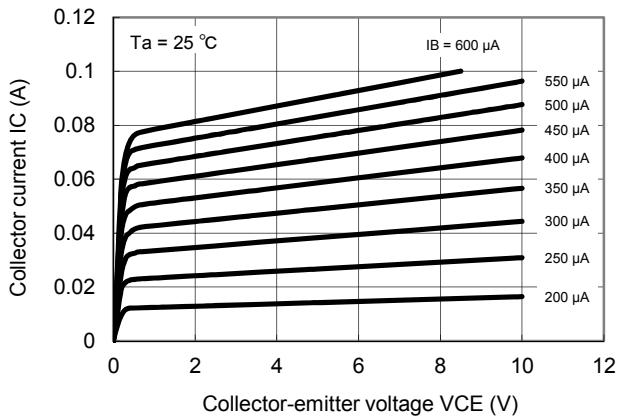
Note 1) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

Technical Data (reference)

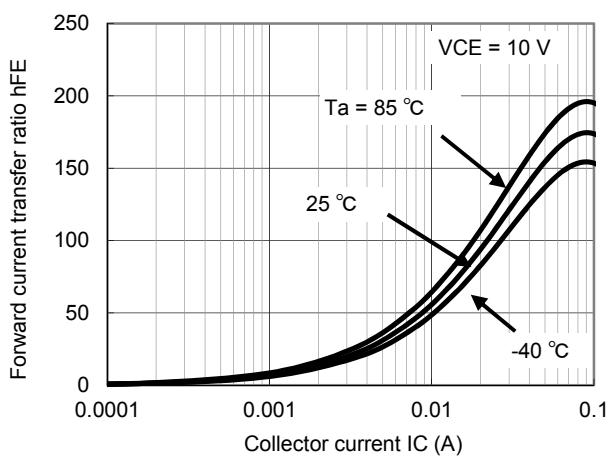
PT - Ta



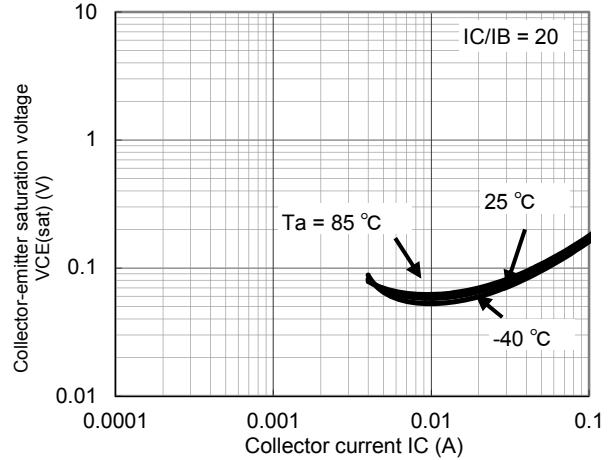
IC - VCE



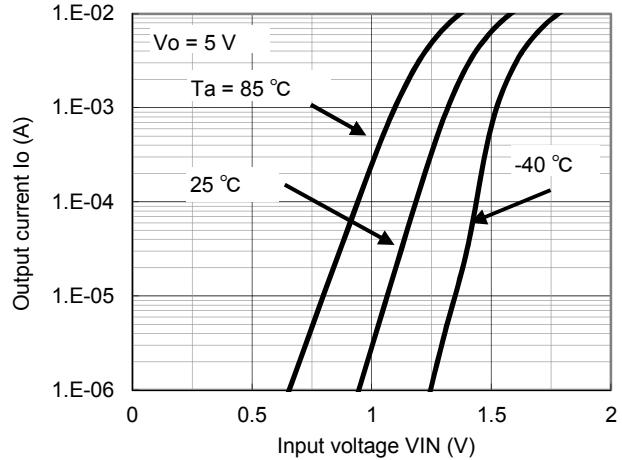
hFE - IC



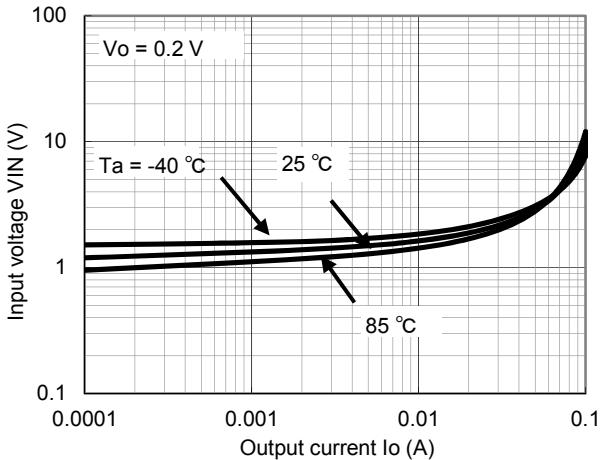
VCE(sat) - IC



Io - VIN



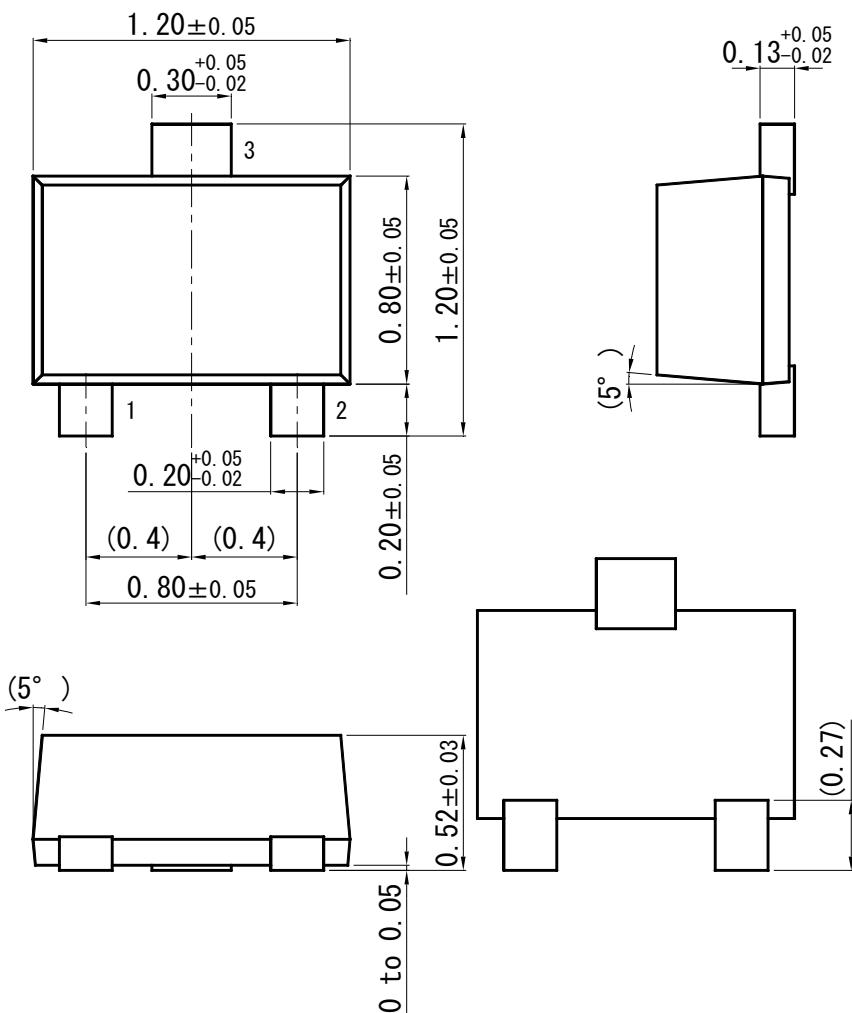
VIN - Io



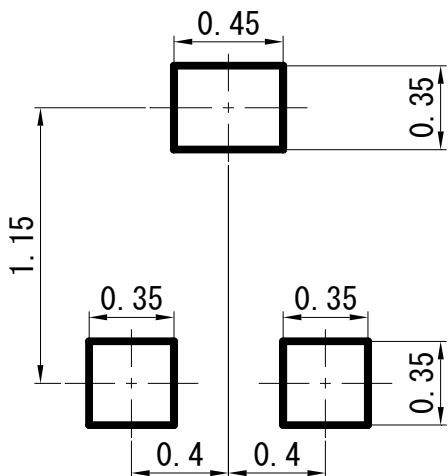


SSSMini3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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