Panasonic

DRC2614T0L

Silicon NPN epitaxial planar type

For digital circuits / Muting

■ Features

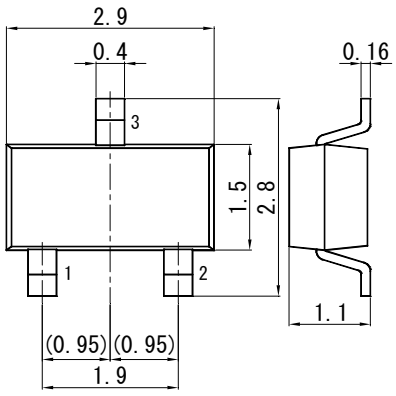
- Low collector-emitter saturation voltage Vce(sat)
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: VT

■ Packaging

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

Unit: mm



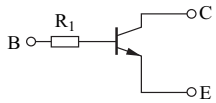
1. Base
2. Emitter
3. Collector

Panasonic	Mini3-G3-B
JEITA	SC-59A
Code	TO-236AA/SOT-23

■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	VCBO	30	V
Collector-emitter voltage (Base open)	VCEO	20	V
Emitter-base voltage (Collector open)	VEBO	5	V
Collector current	IC	600	mA
Total power dissipation	PT	200	mW
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	°C

Internal Connection



Resistance value	R1	10	kΩ

Established : 2010-04-22
Revised : 2014-03-25

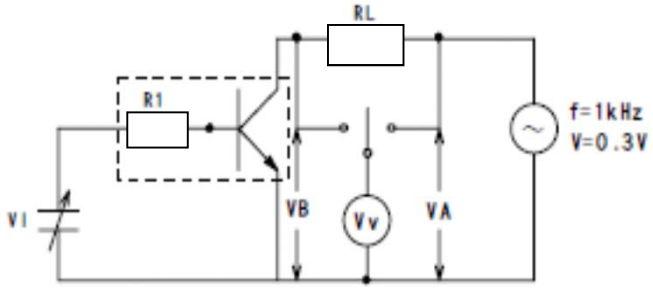
■ Electrical Characteristics Ta = 25 °C ± 3 °C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	VCBO	IC = 10 µA, IE = 0	30			V
Collector-emitter voltage (Base open)	VCEO	IC = 1 mA, IB = 0	20			V
Emitter-base voltage (Collector open)	VEBO	IE = 10 µA, IC = 0	5			V
Collector-base cutoff current (Emitter open)	ICBO	VCB = 30 V, IE = 0			1	µA
Emitter-base cutoff current (Collector open)	IEBO	VEB = 5 V, IC = 0			1	µA
Forward current transfer ratio *1	hFE	VCE = 5 V, IC = 50 mA	100		600	-
Collector-emitter saturation voltage	VCE(sat)	IC = 50 mA, IB = 2.5 mA			80	mV
Input resistance	R1		-30%	10	+30%	kΩ
On resistanc *2	Ron	VI = 7 V, RL = 1 kΩ, f = 1 kHz		2.5		Ω

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

2. *1 Pulse Test

*2 On resistance test circuit



$$Ron = \frac{VB}{VA - VB} \times RL \quad (\Omega)$$

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Transistors with Built-in Resistor

Panasonic

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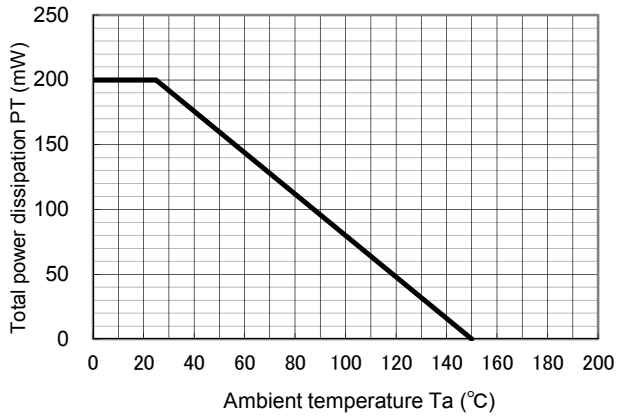
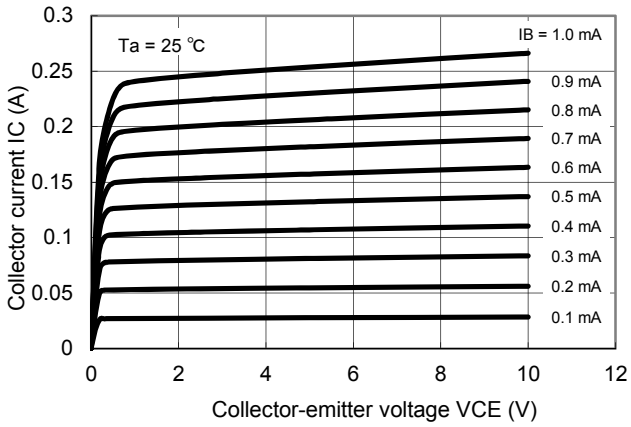
Technical Data (reference)

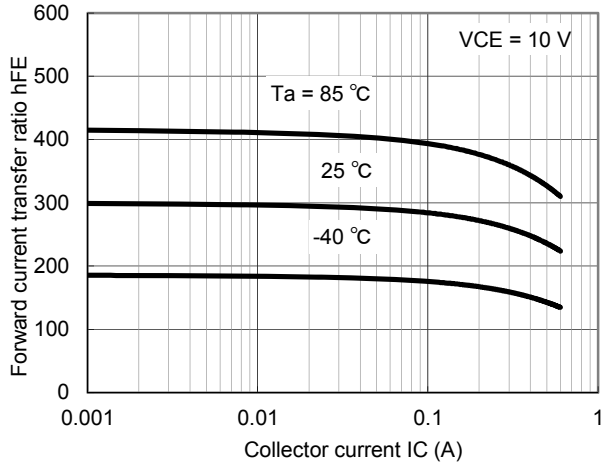
PT - Ta



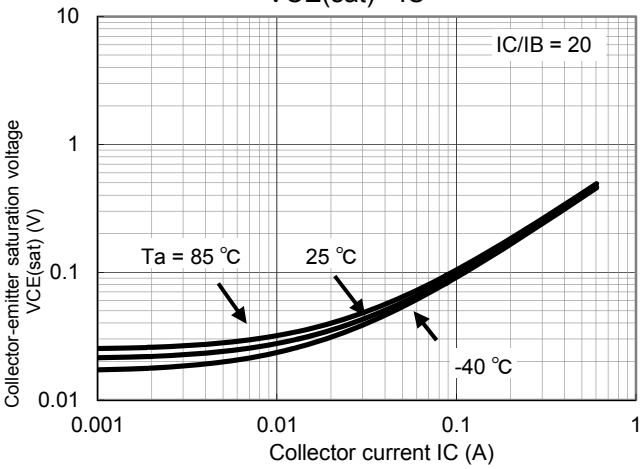
IC - VCE



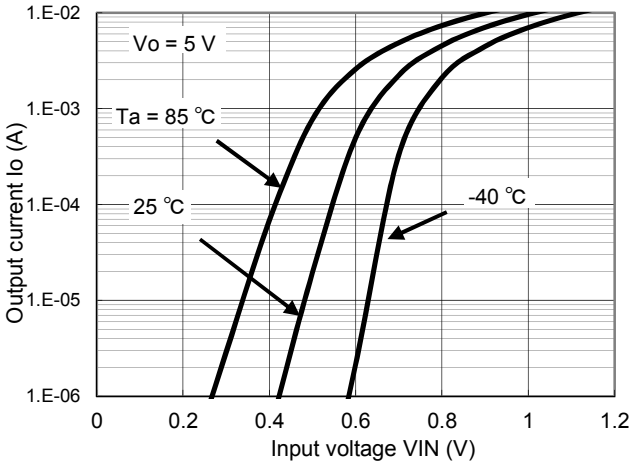
hFE - IC



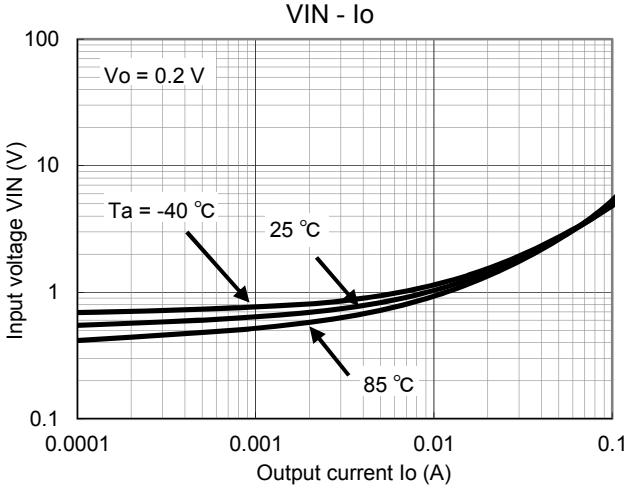
VCE(sat) - IC



Io - VIN



VIN - Io



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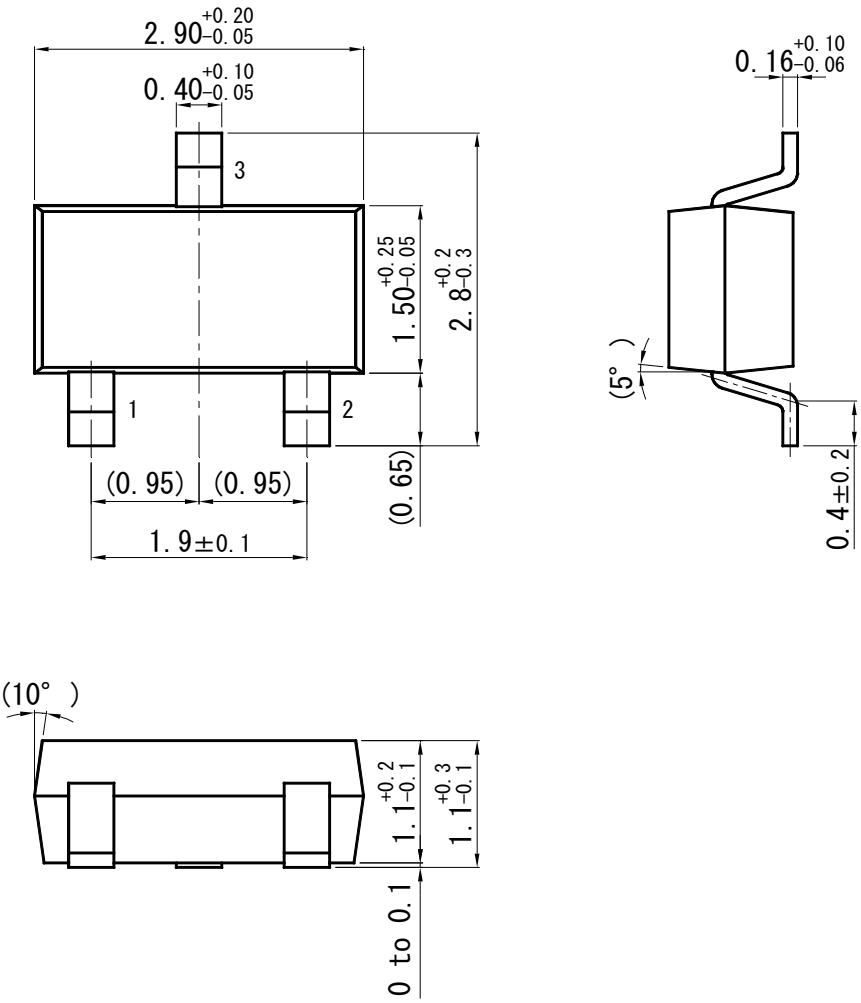
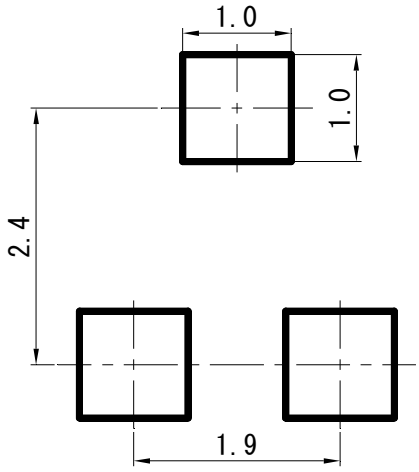
Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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