Revision. 3

Transistors with Built-in Resistor

DRC5614T0L

Panasonic

DRC5614T0L

Silicon NPN epitaxial planar type

For digital circuits / Muting DRC2614T in SMini3 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: VT

Established: 2010-04-22

: 2014-03-20

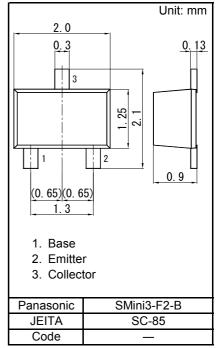
Revised

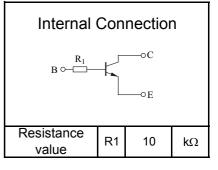
■ Packaging

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





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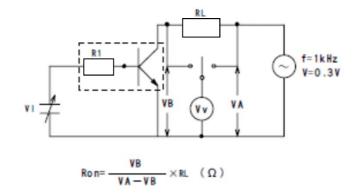
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■ Electrical Characteristics Ta = 25 °C ± 3 °C

Parameter	Symbol	Conditions	Min	Тур	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	μΑ
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	$VI = 7 V$, $RL = 1 k\Omega$, $f = 1 kHz$		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



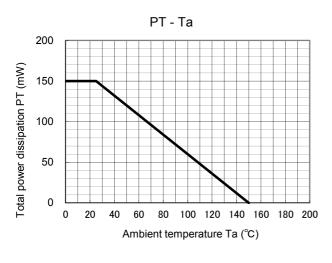
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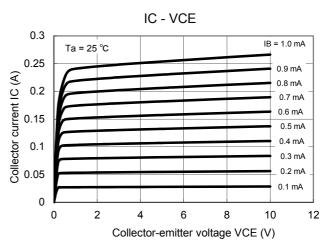
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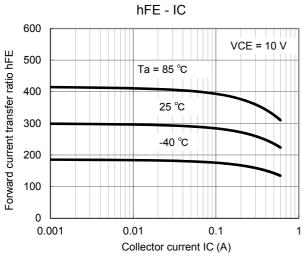
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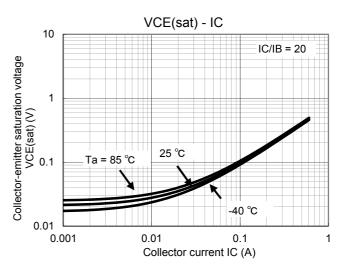
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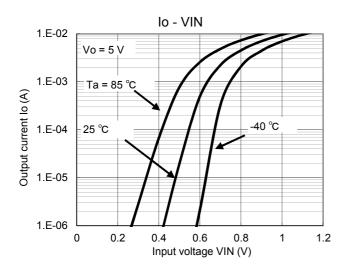
Technical Data (reference)

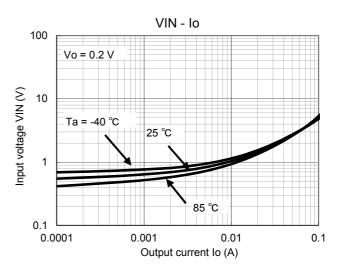










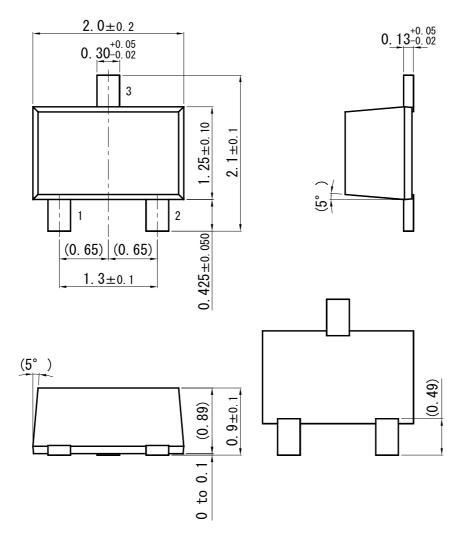


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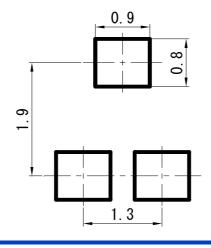
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SMini3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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