imall

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Transistors with Built-in Resistor DRC5114T0L

DRC5114T0L Silicon NPN epitaxial planar type

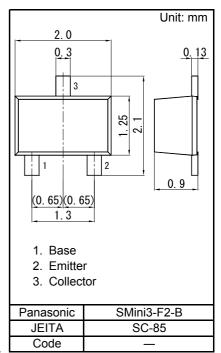
For digital circuits Complementary to DRA5114T DRC2114T in SMini3 type package

Features

- · High forward current transfer ratio hFE with excellent linearity
- Low collector-emitter saturation voltage Vce(sat)
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: ND

Packaging

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



	-				
_	Internal Connection				
_					
			•E		
	Resistance value	R1	10	kΩ	

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

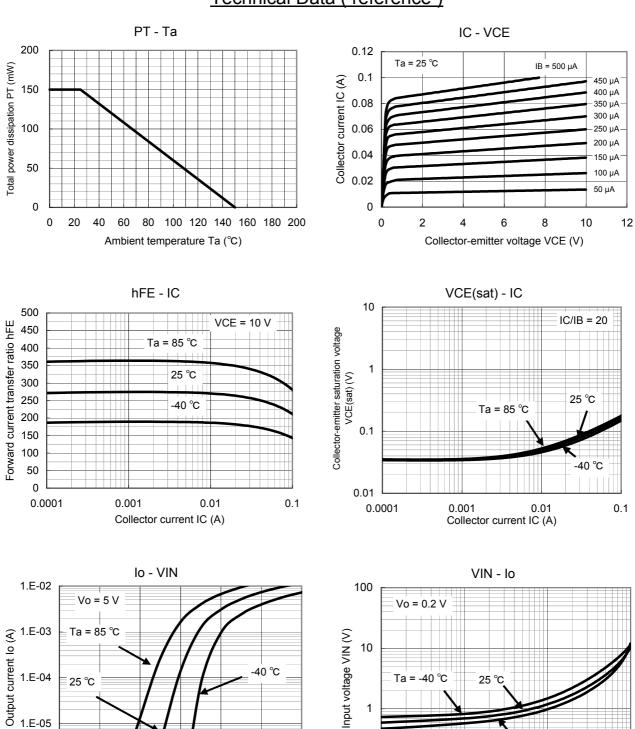
Electrical Characteristics	Ta = 25 °C ± 3 °C
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Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	VCBO	IC = 10 μA, IE = 0	50			V
Collector-emitter voltage (Base open)	VCEO	IC = 2 mA, IB = 0	50			V
Collector-base cutoff 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			0.01	mA
Forward current transfer ratio	hFE	VCE = 10 V, IC = 5 mA	160		460	-
Collector-emitter saturation voltage	VCE(sat)	IC = 10 mA, IB = 0.5 mA			0.25	V
Input voltago	Vi(on)	VCE = 0.2 V, IC = 5 mA	1.2			V
Input voltage	Vi(off)	VCE = 5 V, IC = 100 μA			0.4	V
Input resistance	R1		-30%	10	+30%	kΩ

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

Panasonic

Transistors with Built-in Resistor DRC5114T0L



0.1

0.0001

Technical Data (reference)

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0.1

85 °C

0.01

Output current Io (A)

0.001

Established : 2009-10-15 Revised : 2014-03-20

1.E-06

0

0.2

0.4

0.6

Input voltage VIN (V)

0.8

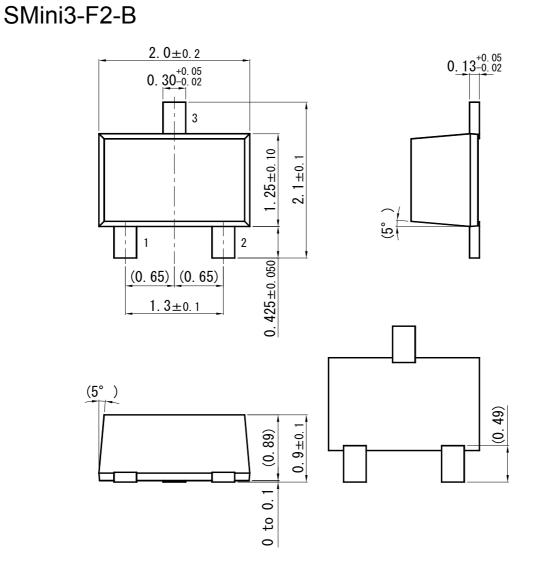
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1.2

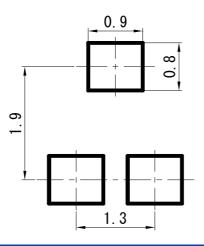


Transistors with Built-in Resistor DRC5114T0L

Unit: mm



Land Pattern (Reference) (Unit: mm)



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NIC _____

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