imall

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Transistors with Built-in Resistor DRC9114Y0L

DRC9114Y0L Silicon NPN epitaxial planar type

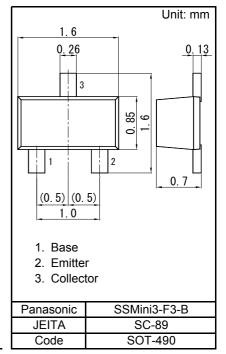
For digital circuits Complementary to DRA9114Y DRC5114Y in SSMini3 type package

Features

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

Packaging

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



R2

47

value

IDUI	Rating	Unit	
BO	50	V	
EO	50	V	Internal Connection
C	100	mA	
Т	125	mW	R ₁ C
ij	150	°C	B O-CIT
pr	-40 to +85	°C	
stg	-55 to +150	°C	
			Resistance R1 10

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

■ 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	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			0.2	mA				
Forward current transfer ratio	hFE	VCE = 10 V, IC = 5 mA	80			-				
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				
Input voltage	Vi(off)	VCE = 5 V, IC = 100 µA			0.5	V				
Input resistance	R1		-30%	10	+30%	kΩ				
Resistance ratio	R1/R2		0.17	0.21	0.25	-				

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

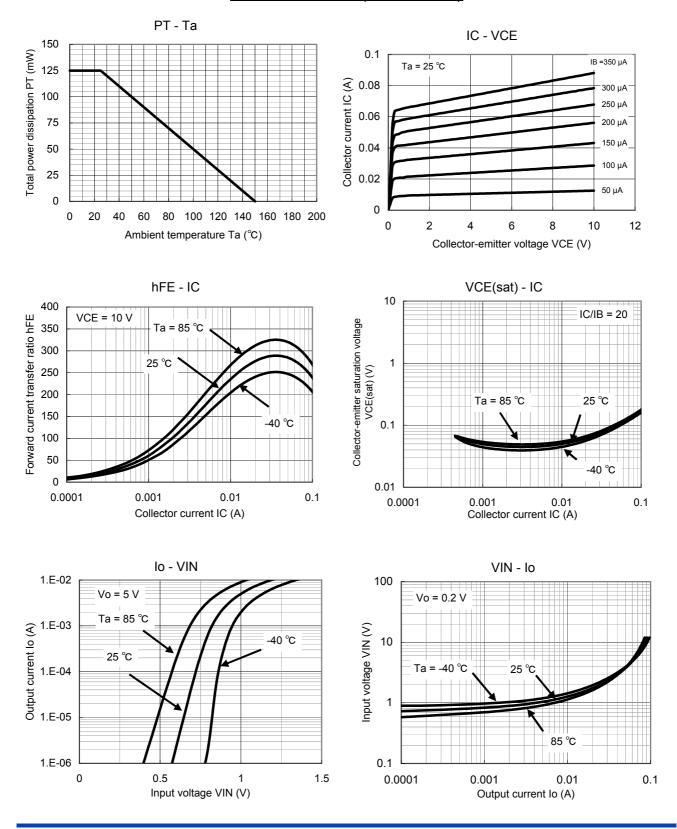
kΩ

kΩ

Transistors with Built-in Resistor DRC9114Y0L



Technical Data (reference)



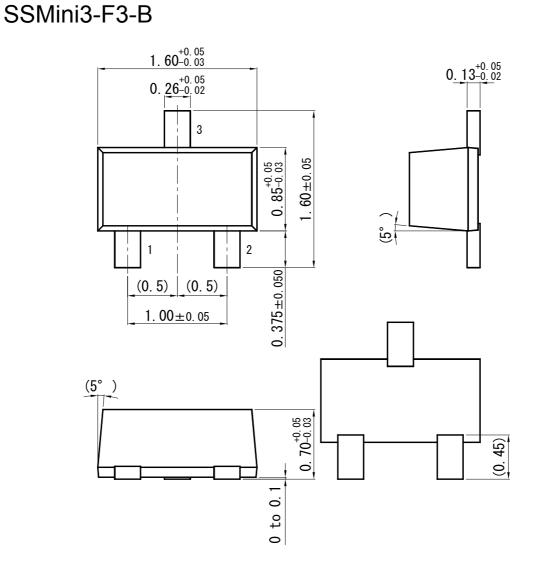
Page 2 of 3

Established : 2009-10-22 Revised : 2014-03-06

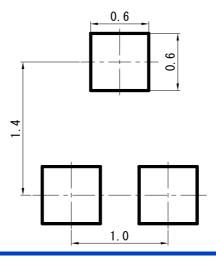


Transistors with Built-in Resistor DRC9114Y0L

Unit: mm



Land Pattern (Reference) (Unit: mm)



Page 3 of 3

Established : 2009-10-22 Revised : 2014-03-06

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