# imall

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Transistors with Built-in Resistor DRA5144V0L

# DRA5144V0L Silicon PNP epitaxial planar type

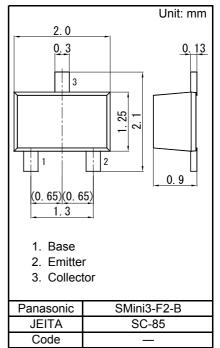
For digital circuits Complementary to DRC5144V DRA2144V in SMini3 type package

#### Features

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

#### Packaging

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



_	Internal Connection						
_	$B \circ \overset{R_1}{\underset{R_2}{\longrightarrow}} \circ C$						
_	- └──o E						
	Resistance	R1	47	kΩ			
	value	R2	10	kΩ			

### ■ Absolute Maximum Ratings Ta = 25 °C

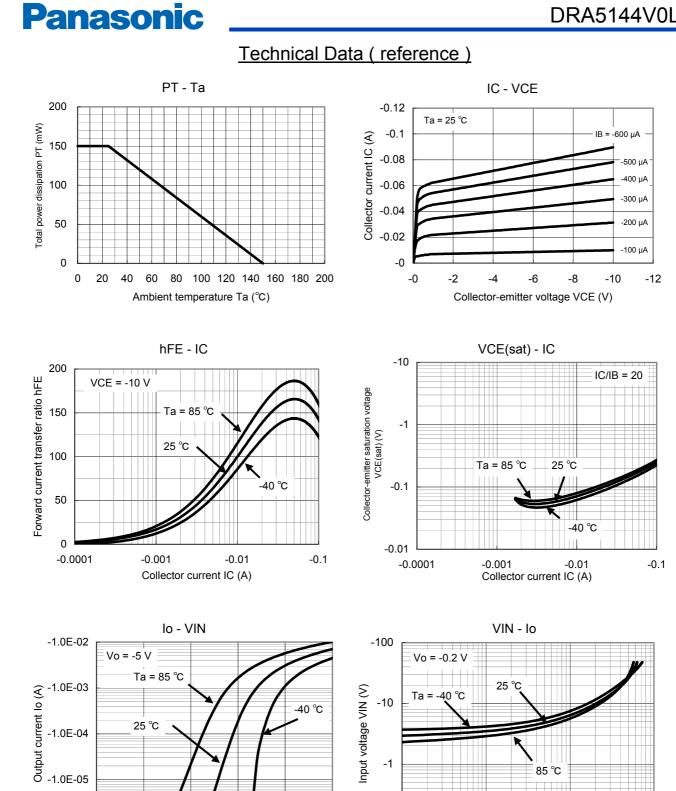
Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	VCBO	-50	V	
Collector-emitter voltage (Base open)	VCEO	-50	V	
Collector current	IC	-100	mA	
Total power dissipation	PT	150	mW	
Junction temperature	Tj	150	°C	
Operating ambient temperature	Topr	-40 to +85	°C	
Storage temperature	Tstg	-55 to +150	С°	

cal 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			-0.2	mA		
Forward current transfer ratio	hFE	VCE = -10 V, IC = -5 mA	30			-		
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	-6.3			V		
input voltage	Vi(off)	VCE = -5 V, IC = -100 µA			-1.9	V		
Input resistance	R1		-30%	47	+30%	kΩ		
Resistance ratio	R1/R2		3.7	4.7	5.7	-		

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

Transistors with Built-in Resistor DRA5144V0L



-1

-0.1

-0.0001

Page 2 of 3

-0.1

85 °C

Output current Io (A)

-0.01

-0.001

-1.0E-06

-0

-1

-2

Input voltage VIN (V)

-3

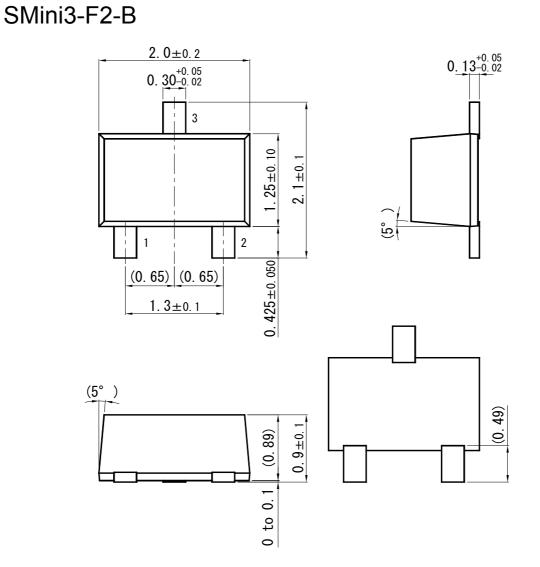
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-5

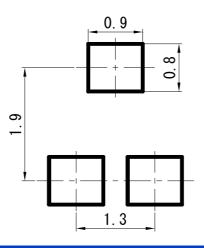


Transistors with Built-in Resistor DRA5144V0L

Unit: mm



Land Pattern (Reference) (Unit: mm)



Page 3 of 3

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