# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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## Contact us

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## Panasonic

Transistors with Built-in Resistor DRC2143T0L

### DRC2143T0L Silicon NPN epitaxial planar type

For digital circuits Complementary to DRA2143T

#### Features

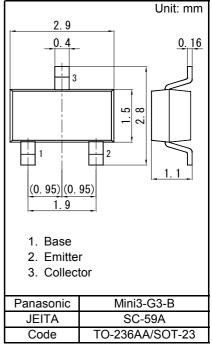
- · High forward current transfer ratio hFE with excellent linearity
- Low collector-emitter saturation voltage Vce(sat)
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Absolute Maximum Ratings Ta = 25 °C

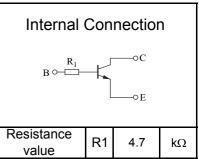
Marking Symbol: NA

#### Packaging

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



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

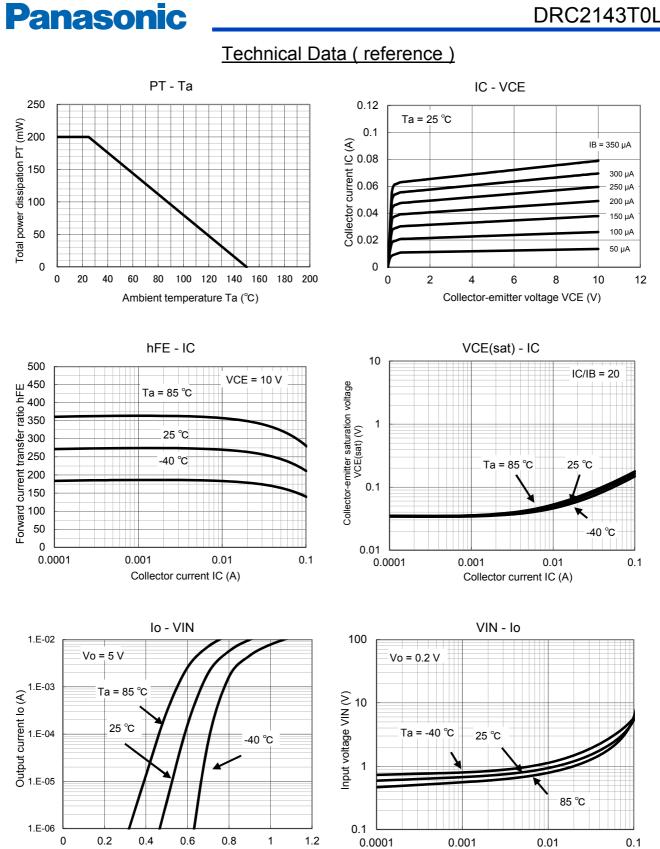


#### ■ Electrical Characteristics Ta = 25 °C ± 3 °C

	<u>1</u> 00						
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 voltage	Vi(on)	VCE = 0.2 V, IC = 5 mA	1.0			V	
	Vi(off)	VCE = 5 V, IC = 100 µA			0.4	V	
Input resistance	R1		-30%	4.7	+30%	kΩ	

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

Transistors with Built-in Resistor DRC2143T0L



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Output current Io (A)

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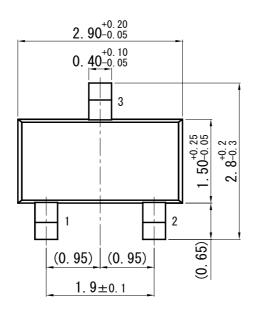
Input voltage VIN (V)

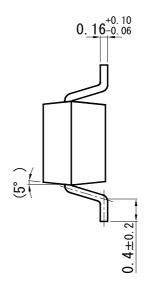


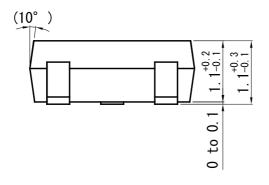
Transistors with Built-in Resistor DRC2143T0L

Mini3-G3-B

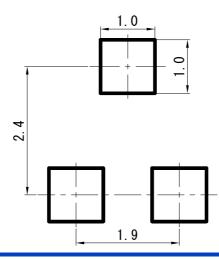
Unit: mm







Land Pattern (Reference) (Unit: mm)



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Established : 2009-10-30 Revised : 2014-03-20

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