# **DRA9143X**

### Silicon PNP epitaxial planar type

For digital circuits Complementary to DRC9143X DRA5143X in SSMini3 type package

#### Features

- Low collector-emitter saturation voltage  $V_{CE(sat)}$
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

#### Packaging

Embossed type (Thermo-compression sealing): 3000 pcs / reel (standard)

#### Absolute Maximum Ratings $T_a = 25^{\circ}C$

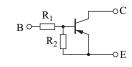
Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-50	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V	
Collector current	I <sub>C</sub>	-100	mA	
Total power dissipation	P <sub>T</sub>	P <sub>T</sub> 125		
Junction temperature	Tj	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	

#### Package

- Code
- SSMini3-F3-B
- Pin Name
  - 1: Base
  - 2: Emitter
  - 3: Collector

#### Marking Symbol: L6

#### Internal Connection



Resistance value	R <sub>1</sub>	4.7	kΩ
	R <sub>2</sub>	10	kΩ

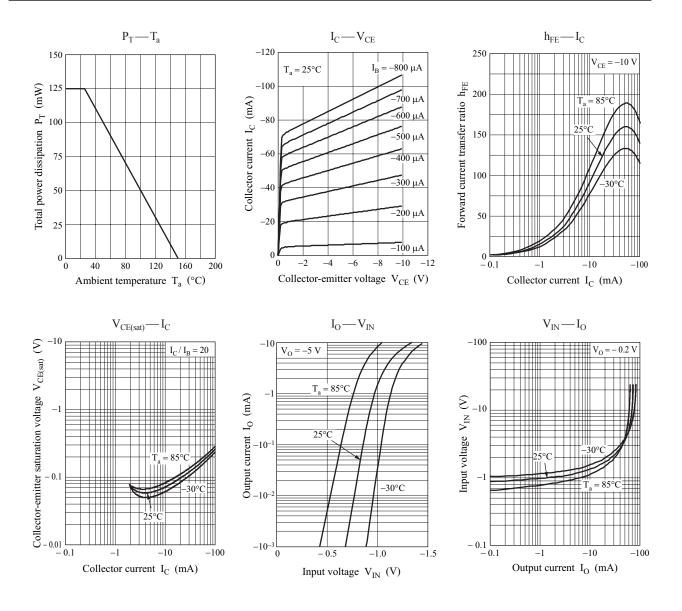
#### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10 \ \mu {\rm A}, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-50			V
Collector-base cutoff current (Emitter open)	I <sub>CBO</sub>	$V_{\rm CB} = -50$ V, $I_{\rm E} = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)	I <sub>CEO</sub>	$V_{\rm CE} = -50$ V, $I_{\rm B} = 0$			- 0.5	μΑ
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = -6 \text{ V}, I_C = 0$			-1.0	mA
Forward current transfer ratio	$\mathbf{h}_{\mathrm{FE}}$	$V_{\rm CE} = -10$ V, $I_{\rm C} = -5$ mA	30			_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_{\rm C} = -10 \text{ mA}, I_{\rm B} = -0.5 \text{ mA}$			-0.25	V
Input voltage (ON)	V <sub>I(on)</sub>	$V_{\rm CE} = -0.2$ V, $I_{\rm C} = -5$ mA	-1.7			V
Input voltage (OFF)	V <sub>I(off)</sub>	$V_{CE} = -5 \text{ V}, I_C = -100 \mu\text{A}$			- 0.6	V
Input resistance	R <sub>1</sub>		-30%	4.7	+30%	kΩ
Resistance ratio	R <sub>1</sub> / R <sub>2</sub>		0.37	0.47	0.57	

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

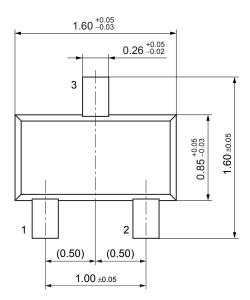
#### DRA9143X

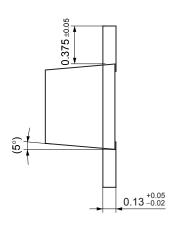
### **Panasonic**

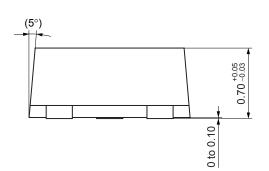


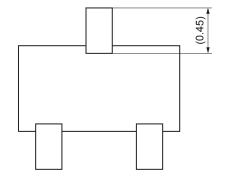
### SSMini3-F3-B

Unit: mm









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