# imall

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# **DMA5610H**

### Silicon PNP epitaxial planar type

#### For digital circuits

DMA2610H in SMini5 type package

#### Features

- Low collector-emitter saturation voltage  $V_{CE(sat)}$
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)
- Marking Symbol: R4

### Basic Part Number

Dual DRA2123Y (Common emitter)

#### Packaging

DMA5610H0R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

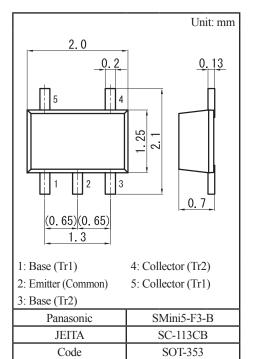
#### Absolute Maximum Ratings $T_a = 25^{\circ}C$

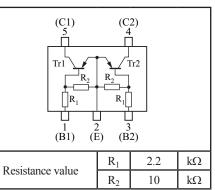
	Parameter	Symbol Rating		Unit	
Tr1 Tr2	Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-50	V	
	Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V	
	Collector current	I <sub>C</sub>	-100	mA	
Overall	Total power dissipation	P <sub>T</sub>	150	mW	
	Junction temperature	Tj	150	°C	
	Operating ambient temperature	T <sub>opr</sub> -40 to +85		°C	
	Storage temperature	T <sub>stg</sub> -55 to +150		°C	

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>	$I_{\rm C} = -2  {\rm mA}, I_{\rm B} = 0$	-50			V				
Collector-base cutoff current (Emitter open)	I <sub>CBO</sub>	$V_{CB} = -50 \text{ V}, I_E = 0$			- 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 <sub>EBO</sub>	$V_{\rm EB} = -6$ V, $I_{\rm C} = 0$			-1.0	mA				
Forward current transfer ratio	$h_{\rm FE}$	$V_{CE} = -10 \text{ V}, I_C = -5 \text{ mA}$	30			—				
h <sub>FE</sub> ratio *1	h <sub>FE</sub> (Small/Large)	$V_{\rm CE} = -10$ V, $I_{\rm C} = -5$ mA	0.50	0.99						
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	-1.1			V				
Input voltage (OFF)	V <sub>I(off)</sub>	$V_{CE} = -5 V, I_C = -100 \mu A$			- 0.5	V				
Input resistance	R <sub>1</sub>		-30%	2.2	+30%	kΩ				
Resistance ratio	R <sub>1</sub> / R <sub>2</sub>		0.17	0.22	0.27					

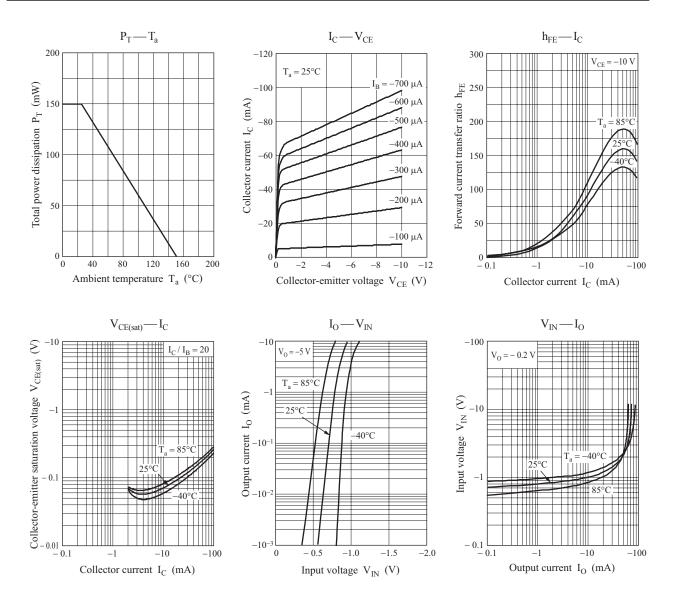
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. \*1: Ratio between 2 elements



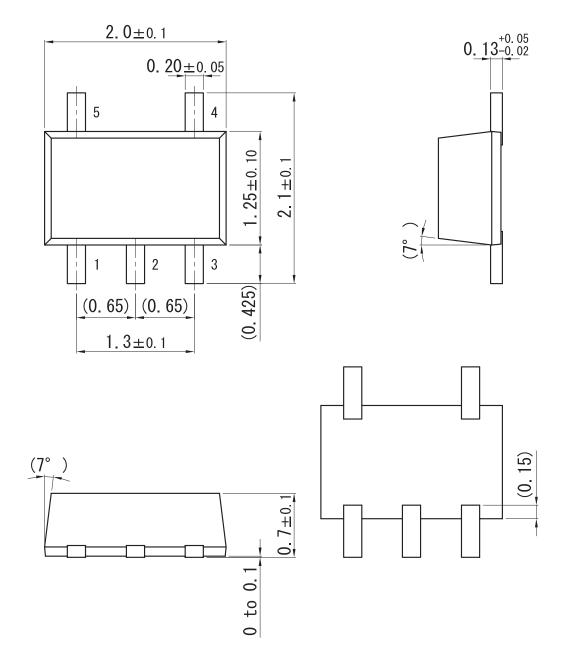


## **Panasonic**

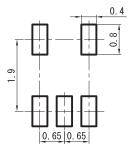


# SMini5-F3-B

Unit: mm



Land Pattern (Reference) (Unit: mm)



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