# DMA56407

# Silicon PNP epitaxial planar type

For digital circuits

## Features

- $\bullet$  High forward current transfer ratio  $h_{FE}$  with excellent linearity
- $\bullet$  Low collector-emitter saturation voltage  $V_{CE(sat)}$
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)
- Marking Symbol: N6

### Basic Part Number

Dual DRA2124T (Individual)

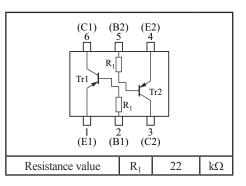
### Packaging

DMA564070R Embossed type (Thermo-compression sealing): 3000 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

#### Unit: mm 2.0 0.2 0.13 Δ 25 2. 2 3 **I** 1 0.7 (0.65)(0.65) 1.3 1: Emitter (Tr1) 4: Emitter (Tr2) 2: Base (Tr1) 5: Base (Tr2) 3: Collector (Tr2) 6: Collector (Tr1) Panasonic SMini6-F3-B JEITA SC-113DB Code SOT-363

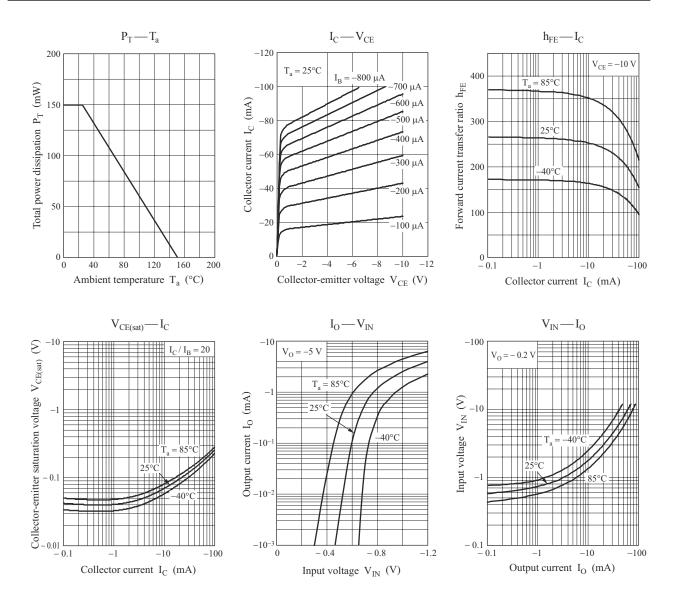


### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

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)	$I_{EBO}$	$V_{\rm EB} = -6  \rm V,  I_{\rm C} = 0$			- 0.01	mA
Forward current transfer ratio	$h_{\rm FE}$	$V_{CE} = -10 \text{ V}, I_C = -5 \text{ mA}$	160		460	
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	-1.8			V
Input voltage (OFF)	V <sub>I(off)</sub>	$V_{CE} = -5 \text{ V}, I_C = -100 \mu\text{A}$			-0.4	V
Input resistance	R <sub>1</sub>		-30%	22	+30%	kΩ

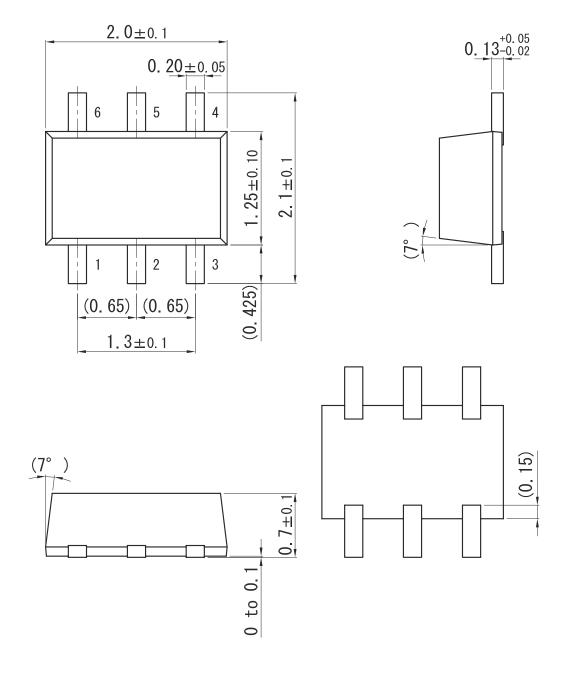
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

# **Panasonic**

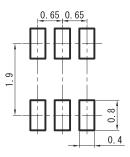


# SMini6-F3-B

Unit: mm



Land Pattern (Reference) (Unit: mm)



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