# DMA56100

### Silicon PNP epitaxial planar type

#### For digital circuits

DMA26100 in SMini5 type package

#### Features

- $\bullet$  High forward current transfer ratio  $h_{FE}$  with excellent linearity
- $\bullet$  Low collector-emitter saturation voltage  $V_{CE(\text{sat})}$
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

#### Basic Part Number

Dual DRA2144T (Common emitter)

#### Packaging

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

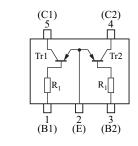
#### Absolute Maximum Ratings $T_a = 25^{\circ}C$

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>	150	mW
Junction temperature	Tj	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

#### Package

- Code
- SMini5-F3-B
- Pin Name
  - 1: Base (Tr1) 4: Collector (Tr2)
  - 2: Emitter (Common) 5: Collector (Tr1)
  - 3: Base (Tr2)
- Marking Symbol: P2

#### Internal Connection



Resistance value	R <sub>1</sub>	47	kΩ

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

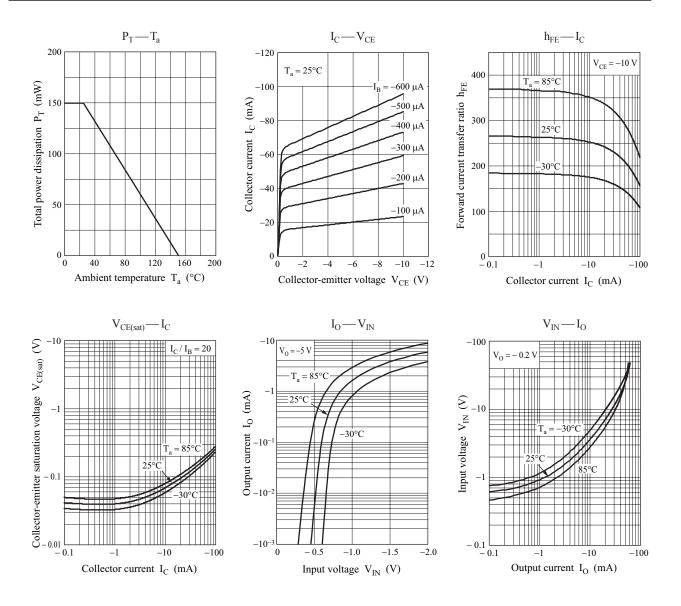
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10 \ \mu {\rm A}, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_{\rm C} = -2  {\rm mA},  I_{\rm B} = 0$	-50			V
Collector-base cutoff current (Emitter open)	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)	$I_{EBO}$	$V_{\rm EB} = -6$ V, $I_{\rm C} = 0$			-0.01	mA
Forward current transfer ratio	$\mathbf{h}_{\mathrm{FE}}$	$V_{CE} = -10 \text{ V}, I_C = -5 \text{ mA}$	160		460	
$h_{FE}$ ratio *	h <sub>FE</sub> (Small/Large)	$V_{CE} = -10 \text{ V}, I_C = -5 \text{ mA}$	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>	$V_{CE} = -0.2 \text{ V}, I_C = -5 \text{ mA}$	-2.8			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%	47	+30%	kΩ

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

2. \*: Ratio between 2 elements

#### DMA56100

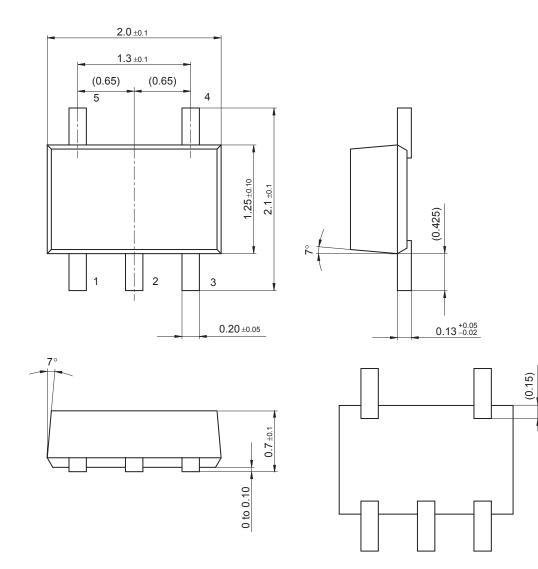
### **Panasonic**



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SMini5-F3-B

Unit: mm



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