# **DMA56101**

# Silicon PNP epitaxial planar type

For digital circuits
DMA26101 in SMini5 type package

#### ■ Features

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

#### ■ Basic Part Number

Dual DRA2114E (Common emitter)

### Packaging

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

# ■ Absolute Maximum Ratings $T_a = 25$ °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	$T_j$	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	

### ■ Package

• Code

SMini5-F3-B

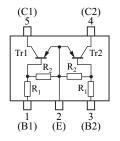
Pin Name

1: Base (Tr1) 4: Collector (Tr2) 2: Emitter (Common) 5: Collector (Tr1)

3: Base (Tr2)

■ Marking Symbol: E0

#### ■ Internal Connection



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

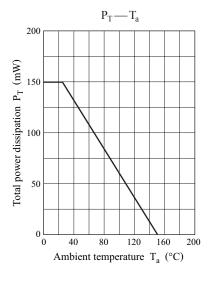
# ■ Electrical Characteristics $T_a = 25$ °C±3°C

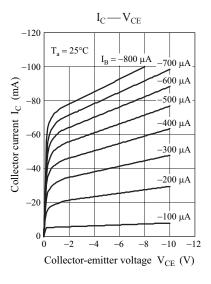
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10  \mu A, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{\rm CB} = -50 \text{ V}, I_{\rm E} = 0$			-0.1	μΑ
Collector-emitter cutoff current (Base open)	I <sub>CEO</sub>	$V_{CE} = -50 \text{ V}, I_{B} = 0$			-0.5	μΑ
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = -6 \text{ V}, I_C = 0$			-0.5	mA
Forward current transfer ratio	h <sub>FE</sub>	$V_{CE} = -10 \text{ V}, I_{C} = -5 \text{ mA}$	35			_
h <sub>FE</sub> 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>	$I_C = -10 \text{ mA}, I_B = -0.5 \text{ mA}$			-0.25	V
Input voltage (ON)	V <sub>I(on)</sub>	$V_{CE} = -0.2 \text{ V}, I_{C} = -5 \text{ mA}$	-2.1			V
Input voltage (OFF)	V <sub>I(off)</sub>	$V_{CE} = -5 \text{ V}, I_{C} = -100  \mu\text{A}$			-0.8	V
Input resistance	$R_1$		-30%	10	+30%	kΩ
Resistance ratio	$R_1/R_2$		0.8	1.0	1.2	_

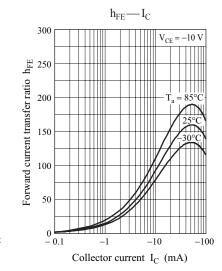
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

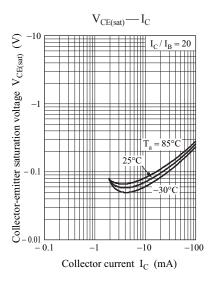
2. \*: Ratio between 2 elements

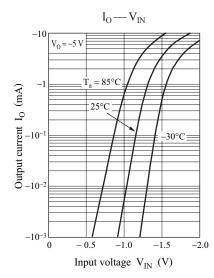
DMA56101 Panasonic

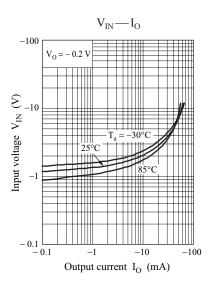








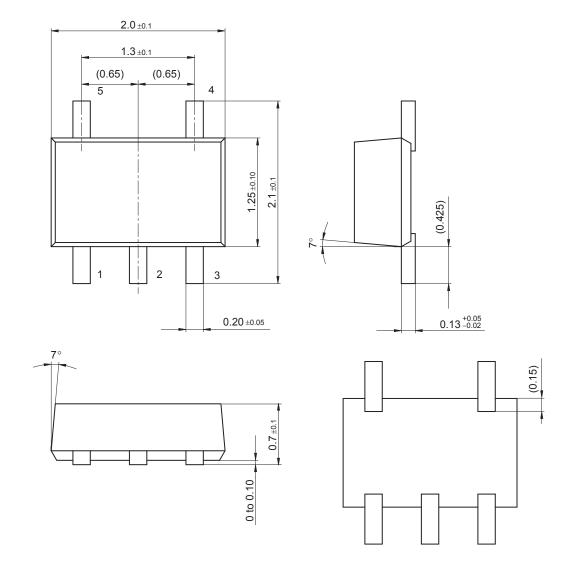




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SMini5-F3-B

Unit: mm



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