# **DMA56108**

# Silicon PNP epitaxial planar type

### For digital circuits

#### ■ Features

- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

#### ■ Basic Part Number

Dual DRA2152Z (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	$I_{C}$	-100	mA	
Total power dissipation	$P_{T}$	150	mW	
Junction temperature	T <sub>j</sub>	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	

#### ■ Package

#### Code

SMini5-F3-B

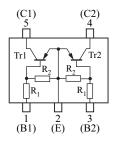
#### • Pin Name

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

3: Base (Tr2)

## ■ Marking Symbol: P0

# ■ Internal Connection



Resistance value	$R_1$	0.51	kΩ
	R <sub>2</sub>	5.1	kΩ

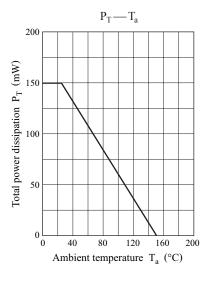
# ■ Electrical Characteristics $T_a = 25$ °C±3°C

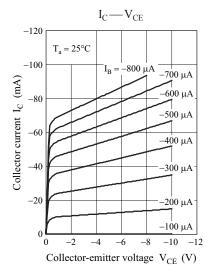
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10 \mu{\rm A}, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -50 \text{ V}, I_E = 0$			-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)	$I_{EBO}$	$V_{EB} = -6 \text{ V}, I_C = 0$			-2.0	mA
Forward current transfer ratio	$h_{\mathrm{FE}}$	$V_{CE} = -10 \text{ V}, I_{C} = -5 \text{ mA}$	20			_
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>	$V_{CE} = -0.2 \text{ V}, I_{C} = -5 \text{ mA}$	-1.0			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	$R_1$		-30%	0.51	+30%	kΩ
Resistance ratio	$R_1/R_2$		0.08	0.10	0.12	_

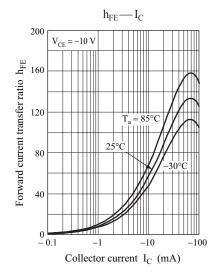
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

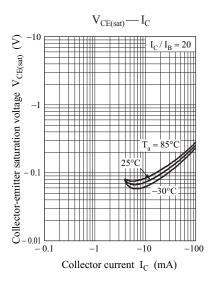
<sup>2. \*:</sup> Ratio between 2 elements

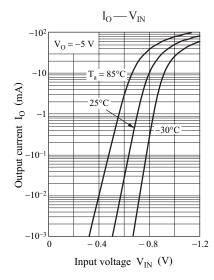
DMA56108 Panasonic

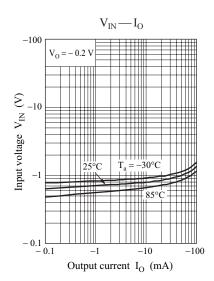








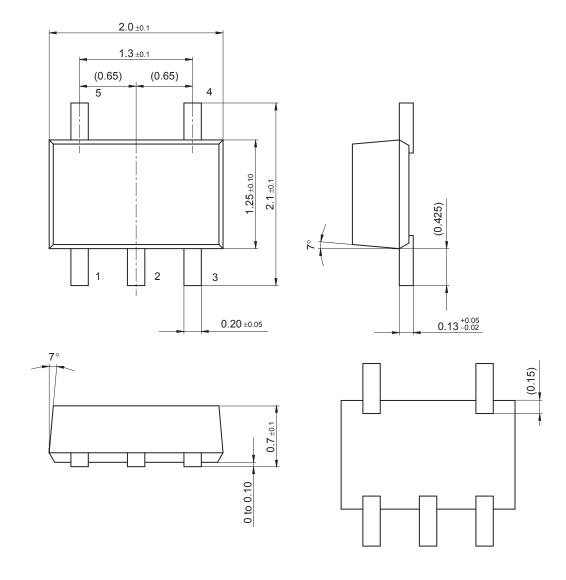




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SMini5-F3-B

Unit: mm



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