# DMA204A0

## Silicon PNP epitaxial planar type

For low frequency amplification

### Features

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

Marking Symbol: C0

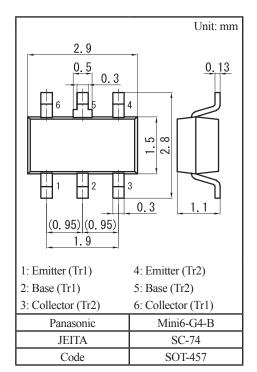
### Basic Part Number

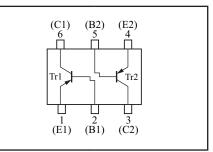
Dual DSA2401 (Individual)

### Packaging

DMA204A00R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

#### Absolute Maximum Ratings $T_a = 25^{\circ}C$ Parameter Symbol Rating Unit V Collector-base voltage (Emitter open) $V_{CBO}$ -15 -10 V Collector-emitter voltage (Base open) V<sub>CEO</sub> Tr1 Emitter-base voltage (Collector open) $V_{EBO}$ -7 V Tr2 -0.5Collector current $I_C$ А Peak collector current -1А $I_{CP}$ $\mathbf{P}_{\mathrm{T}}$ 300 Total power dissipation mW 150 °C Junction temperature T<sub>i</sub> Overall Operating ambient temperature Topr -40 to +85 °C -55 to +150 Storage temperature °C T<sub>stg</sub>



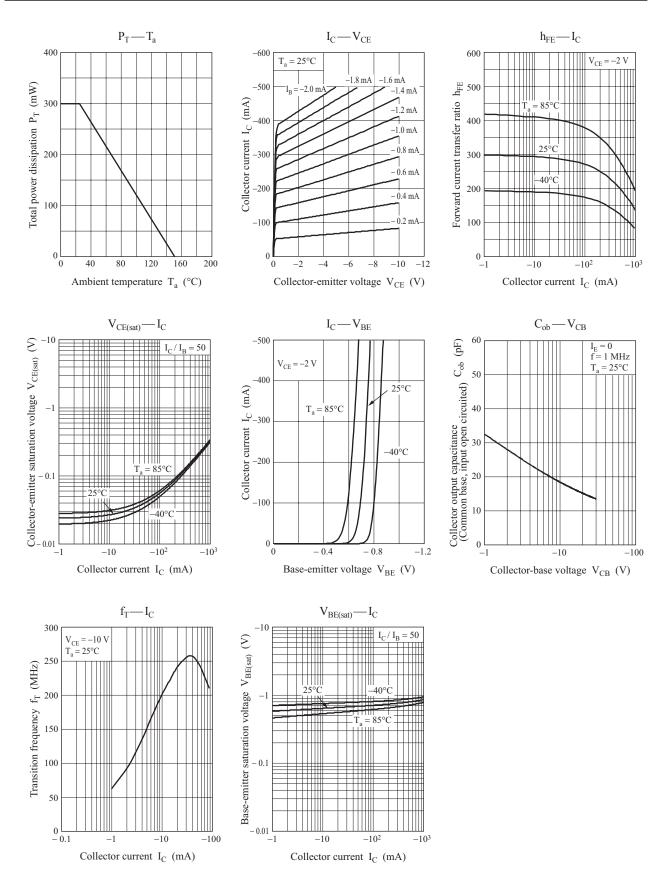


### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

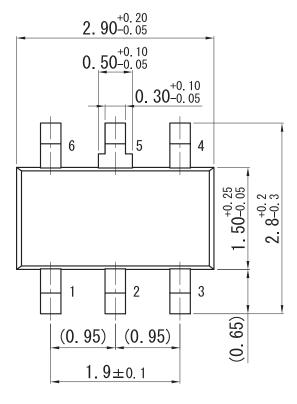
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10 \ \mu {\rm A}, I_{\rm E} = 0$	-15			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_{\rm C} = -1  {\rm mA},  I_{\rm B} = 0$	-10			V
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	$I_{\rm E} = -10 \ \mu A, I_{\rm C} = 0$	-7			V
Collector-base cutoff current (Emitter open)	I <sub>CBO</sub>	$V_{CB} = -10 \text{ V}, I_E = 0$			-100	nA
Forward current transfer ratio *1	h <sub>FE1</sub>	$V_{CE} = -2 V, I_C = -0.5 A$	130		350	
	h <sub>FE2</sub>	$V_{CE} = -2 V, I_C = -1 A$	60			
Collector-emitter saturation voltage *1	V <sub>CE(sat)</sub>	$I_{\rm C} = -0.4  \text{A}, I_{\rm B} = -8  \text{mA}$		- 0.15	-0.30	V
Base-emitter saturation voltage *1	V <sub>BE(sat)</sub>	$I_{\rm C} = -0.4  \text{A}, I_{\rm B} = -8  \text{mA}$		- 0.8	-1.2	V
Transition frequency	$f_{T}$	$V_{CE} = -10 \text{ V}, I_C = -50 \text{ mA}$		250		MHz
Collector output capacitance (Common base, input open circuited)	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		18		pF

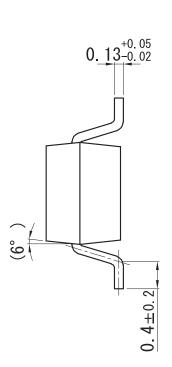
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

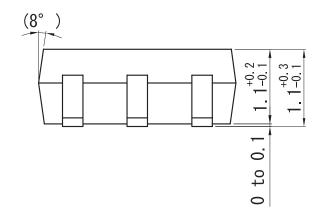
2. \*1: Pulse measurement



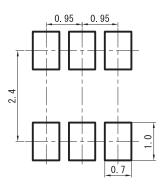
## Mini6-G4-B







Land Pattern (Reference) (Unit: mm)



Unit: mm

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