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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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## **DMA20401**

### Silicon PNP epitaxial planar type

For general amplification

#### ■ Features

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

#### ■ Marking Symbol: A7

#### ■ Basic Part Number

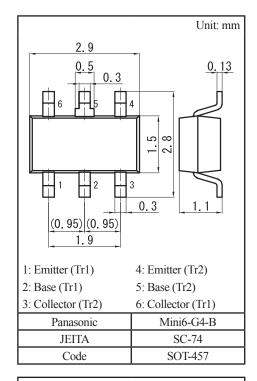
Dual DSA2001 (Individual)

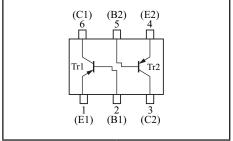
#### Packaging

DMA204010R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

	Parameter	Symbol	Rating	Unit
Tr1 Tr2	Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-60	V
	Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V
	Emitter-base voltage (Collector open)	V <sub>EBO</sub>	-7	V
	Collector current	$I_{C}$	-100	mA
	Peak collector current	I <sub>CP</sub>	-200	mA
Overall	Total power dissipation	$P_{T}$	300	mW
	Junction temperature	T <sub>j</sub>	150	°C
	Operating ambient temperature	T <sub>opr</sub> -40 to +85		°C
	Storage temperature	T <sub>stg</sub>	-55 to +150	°C



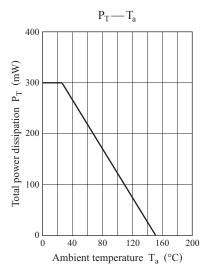


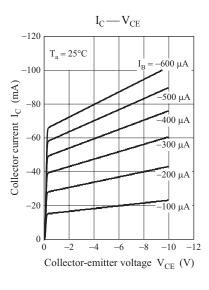
#### ■ Electrical Characteristics $T_a = 25$ °C±3°C

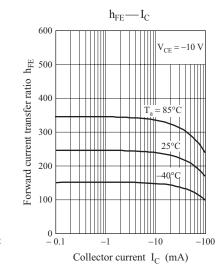
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10  \mu A, I_{\rm E} = 0$	-60			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Emitter-base voltage (Collector open)	$V_{\mathrm{EBO}}$	$I_E = -10 \mu\text{A}, I_C = 0$	-7			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{\rm CB} = -20 \text{ V}, I_{\rm E} = 0$			-0.1	μΑ
Collector-emitter cutoff current (Base open)	I <sub>CEO</sub>	$V_{CE} = -10 \text{ V}, I_{B} = 0$			-100	μΑ
Forward current transfer ratio	$h_{FE}$	$V_{CE} = -10 \text{ V}, I_{C} = -2 \text{ mA}$	210		460	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$		-0.2	-0.5	V
Transition frequency	$f_T$	$V_{CE} = -10 \text{ V}, I_{C} = -2 \text{ mA}$		150		MHz
Collector output capacitance (Common base, input open circuited)	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		2		pF

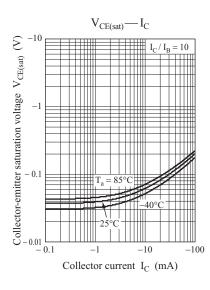
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

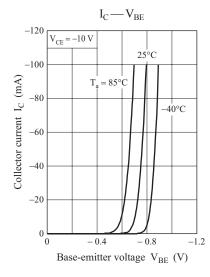
DMA20401 Panasonic

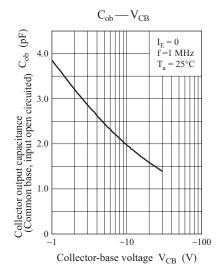


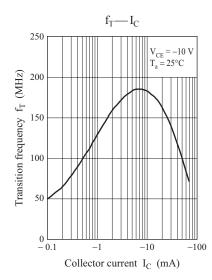








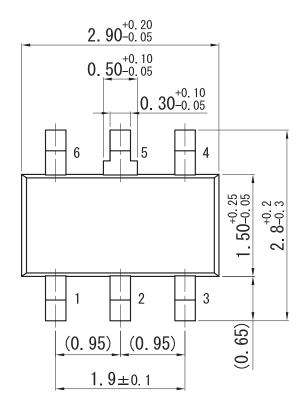


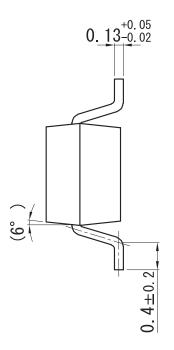


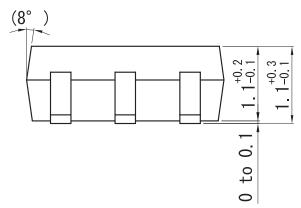
Ver. DED 2

Mini6-G4-B

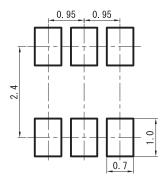
Unit: mm







#### ■ Land Pattern (Reference) (Unit: mm)



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