

# Digital Transistor (Dual Digital Transistors for Inverter Drive)

## IMD8A

### ●Features

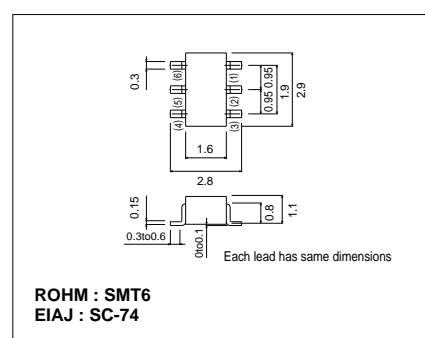
1) Both the DTA144T chip and DTC144T chip in a SMT package.

### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V <sub>CB0</sub>	50	V
Collector-emitter voltage	V <sub>CE0</sub>	50	V
Emitter-base voltage	V <sub>EB0</sub>	5	V
Collector current	I <sub>c</sub>	100	mA
Collector power dissipation	P <sub>c</sub>	300(TOTAL)	mW *
Storage temperature	T <sub>stg</sub>	-55~+150	°C

\* 200mW per element must not be exceeded. PNP type negative symbols have been omitted.

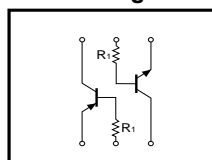
### ●External dimensions (Units : mm)



### ●Package, marking, and packaging specifications

Type	IMD8A
Package	SMT6
Marking	D8
Code	T108
Basic ordering unit (pieces)	3000

### ●Circuit diagram



### ●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV <sub>CB0</sub>	50	-	-	V	I <sub>c</sub> = 50μA
Collector-emitter breakdown voltage	BV <sub>CE0</sub>	50	-	-	V	I <sub>c</sub> = 1mA
Emitter-base breakdown voltage	BV <sub>EB0</sub>	50	-	-	V	I <sub>e</sub> = 50μA
Collector cutoff current	I <sub>cbo</sub>	-	-	0.5	μA	V <sub>CB</sub> = 50V
Emitter cutoff current	I <sub>ebo</sub>	-	-	0.5	μA	V <sub>EB</sub> = 4V
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	-	-	0.3	V	I <sub>c</sub> = 5mA , I <sub>b</sub> = 0.5mA
DC current transfer ratio	h <sub>FE</sub>	100	250	600	-	V <sub>CE</sub> = 5V , I <sub>c</sub> = 1mA
Input resistance	R <sub>i</sub>	32.9	47	61.1	kΩ	-

PNP type negative symbols have been omitted.