

Digital Transistor (Dual Digital Transistors for Inverter Drive)

IMD8A

●Features

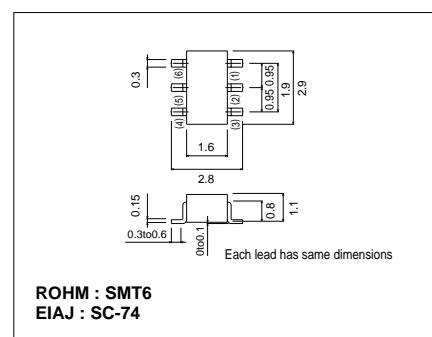
- 1) Both the DTA144T chip and DTC144T chip in a SMT package.

●Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Collector power dissipation	P_C	300(TOTAL)	mW *
Storage temperature	T_{STG}	-55~+150	°C

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

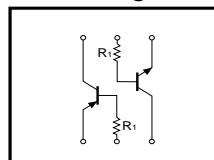
●External dimensions (Units : mm)



●Package, marking, and packaging specifications

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

●Circuit diagram



●Electrical characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	50	—	—	V	$I_C = 50\mu\text{A}$
Collector-emitter breakdown voltage	BV_{CEO}	50	—	—	V	$I_C = 1\text{mA}$
Emitter-base breakdown voltage	BV_{EBO}	50	—	—	V	$I_E = 50\mu\text{A}$
Collector cutoff current	I_{CBO}	—	—	0.5	μA	$V_{CB} = 50\text{V}$
Emitter cutoff current	I_{EBO}	—	—	0.5	μA	$V_{EB} = 4\text{V}$
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	—	—	0.3	V	$I_C = 5\text{mA}$, $I_E = 0.5\text{mA}$
DC current transfer ratio	h_{FE}	100	250	600	—	$V_{CE} = 5\text{V}$, $I_C = 1\text{mA}$
Input resistance	R_1	32.9	47	61.1	k Ω	—

PNP type negative symbols have been omitted.