

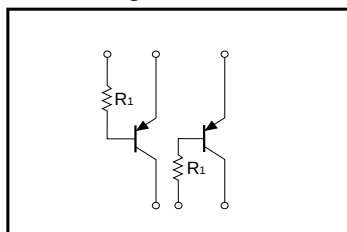
General purpose (dual digital transistors)

IMB7A

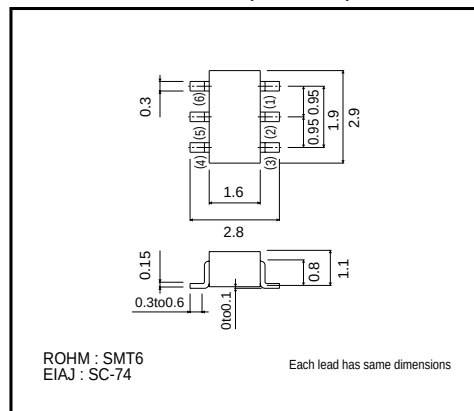
●Features

- 1) Two DTA143T chips in a SMT package.

●Circuit diagram



●External dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°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 *
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

*200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Type	IMB7A
Package	SMT6
Marking	B7
Code	T108
Basic ordering unit (pieces)	3000

Transistors

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	-50	—	—	V	$I_C = -50\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	-50	—	—	V	$I_C = -1mA$
Emitter-base breakdown voltage	BV_{EBO}	-5	—	—	V	$I_E = -50\mu A$
Collector cutoff current	I_{CBO}	—	—	-0.5	μA	$V_{CB} = -50V$
Emitter cutoff current	I_{EBO}	—	—	-0.5	μA	$V_{EB} = -4V$
DC current transfer ratio	h_{FE}	100	250	600	—	$V_{CE}/I_C = -5V/-1mA$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.3	V	$I_C/I_B = -5mA/-0.25mA$
Input resistance	R_1	3.29	4.7	6.11	$k\Omega$	—

Notes

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