



THE DATASHEET OF IMB7



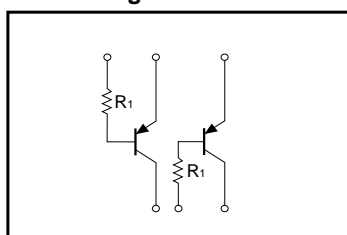
General purpose (dual digital transistors)

IMB7A

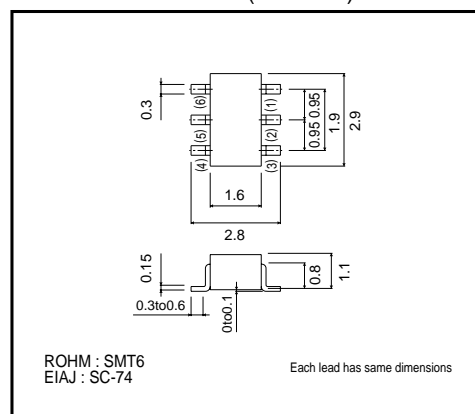
●Features

- 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 _{CB0}	-50	V
Collector-emitter voltage	V _{CE0}	-50	V
Emitter-base voltage	V _{EB0}	-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 _{CB0}	-50	-	-	V	I _C = -50μA
Collector-emitter breakdown voltage	BV _{CE0}	-50	-	-	V	I _C = -1mA
Emitter-base breakdown voltage	BV _{EB0}	-5	-	-	V	I _E = -50μA
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	kΩ	-

Notes

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