

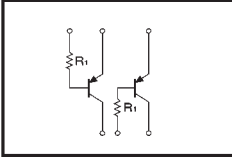
General purpose (dual digital transistors)

IMB7A

●Features

- 1) Two DTA143T chips in a SMT package.

●Circuit diagram



●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~+150	°C

* 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	IMB7A
Package	SMT6
Marking	B7
Code	T110
Basic ordering unit (pieces)	3000

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	-50	—	—	V	I _c =-50 μA
Collector-emitter breakdown voltage	BV _{CE0}	-50	—	—	V	I _c =-1mA
Emitter-base breakdown voltage	BV _{EB0}	-5	—	—	V	I _E =-50 μA
Collector cutoff current	I _{CB0}	—	—	-0.5	μA	V _{CB} =-50V
Emitter cutoff current	I _{EB0}	—	—	-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 _i	3.29	4.7	6.11	kΩ	—

(94S-849-A143T)

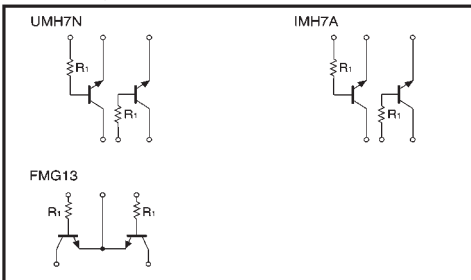
General purpose (dual digital transistors)

UMH7N / FMG13 / IMH7A

●Features

- 1) Includes two DTA143T transistors in a single UMT package.

●Circuit diagram



●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	UMH7N	150 (TOTAL)	mW *1
	FMG13, IMH7A	300 (TOTAL)	mW *2
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55~+150	°C

*1 120mW per element must not be exceeded.

*2 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	UMH7N	FMG13	IMH7A
Package	UMT6	SMT5	SMT6
Marking	H7	G13	H7
Code	TR	T148	T108
Basic ordering unit (pieces)	3000	3000	3000

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	50	—	—	V	I _c =50 μA
Collector-emitter breakdown voltage	BV _{CE0}	50	—	—	V	I _c =1mA
Emitter-base breakdown voltage	BV _{EB0}	5	—	—	V	I _E =50 μA
Collector cutoff current	I _{CB0}	—	—	0.5	μA	V _{CB} =50V
Emitter cutoff current	I _{EB0}	—	—	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 _i	3.29	4.7	6.11	kΩ	—

(94S-877-C143T)