

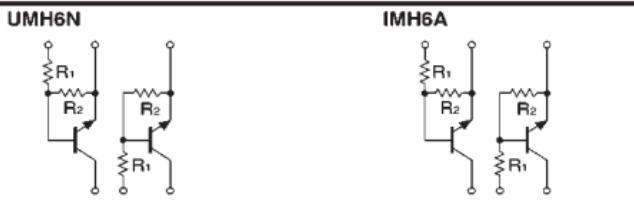
General purpose (dual digital transistors)

UMH6N / IMH6A

● Features

- Two DTC144E chips in a SMT package.

● Circuit diagrams



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

Parameter	Symbol	Limits	Unit
Supply voltage	V _{cc}	50	V
Input voltage	V _{IN}	40 -10	V
Output current	I _o	30	mA
Power dissipation	P _d	150 (TOTAL) 300 (TOTAL)	mW *1 *2
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-50~+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.	UMH6N	IMH6A
Package	UMT6	SMT6
Marking	H6	H6
Code	TR	T108
Basic ordering unit (pieces)	3000	3000

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V _{i (off)}	—	—	0.5	V	V _{cc} =5V, I _o =100 μA
	V _{i (on)}	3	—	—		V _{cc} =0.3V, I _o =2mA
Output voltage	V _{o (on)}	—	0.1	0.3	V	I _o /I _i =10mA/0.5mA
Input current	I _i	—	—	0.18	mA	V _i =5V
Output current	I _{o (off)}	—	—	0.5	μA	V _{cc} =50V, V _i =0V
DC current gain	G _i	68	—	—	—	I _o /V _o =5mA/5V
Input resistance	R _i	32.9	47	61.1	kΩ	—
Resistance ratio	R ₂ /R ₁	0.8	1	1.2	—	—
Transition frequency	f _t	—	250	—	MHz	V _{ce} =10V, I _e =-5mA, f=100MHz *

* Transition frequency of the device.