

General purpose (dual digital transistors)

UMG1N / UMH1N / UMH5N / FMG1A / IMH1A / IMH5A

●Features

- 1) Two DTA124E chips in a UMT or SMT package.

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	50	V
Input voltage	V _{IN}	40	V
Output current	I _O	-10	mA
Power dissipation	P _d	150(TOTAL)	mW *1
		300(TOTAL)	mW *2
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C

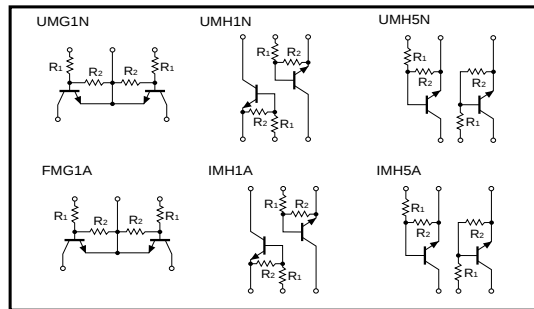
*1 120mW per element must not be exceeded.

*2 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

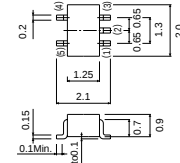
Part No.	UMG1N	UMH1N	UMH5N	FMG1A	IMH1A	IMH5A
Package	UMT5	UMT6	UMT6	SMT5	SMT6	SMT6
Marking	G1	H1	H5	G1	H1	H5
Code	TR	TN	TR	T148	T110	T110
Basic ordering unit (pieces)	3000	3000	3000	3000	3000	3000

●Circuit schematic



●External dimensions (Units : mm)

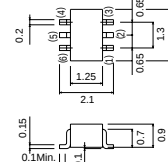
UMG1N



ROHM : UMT5
EIAJ : SC-88A

Each lead has same dimensions

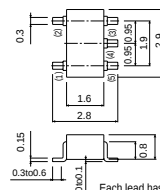
UMH1N, UMH5N



ROHM : UMT6
EIAJ : SC-88

Each lead has same dimensions

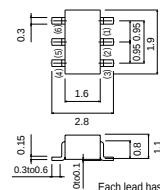
FMG1A



ROHM : SMT5
EIAJ : SC-74A

Each lead has same dimensions

IMH1A, IMH5A



ROHM : SMT6
EIAJ : SC-74

Each lead has same dimensions

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V _{I(off)}	—	—	0.5	V	V _{CC} = 5V, I _O = 100μA
	V _{I(on)}	3	—	—	V	V _O = 0.2V, I _O = 5mA
Output voltage	V _{O(on)}	—	0.1	0.3	V	I _O = 10mA, I _I = 0.5mA
Input current	I _I	—	—	0.36	mA	V _I = 5V
Output current	I _{O(off)}	—	—	0.5	μA	V _{CC} = 50V, V _I = 0V
DC current gain	G _I	56	—	—	—	V _O = 5V, I _O = 5mA
Input resistance	R _I	15.4	22	28.6	kΩ	—
Resistance ratio	R ₂ /R ₁	0.8	1	1.2	—	—