

Transistors

General purpose (dual digital transistors)

UMA1N / UMB1N / UMB5N / FMA1A / IMB1A / IMB5A

●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	-100	mA
Power dissipation	Pd	150(TOTAL)	mW *1
		300(TOTAL)	
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C

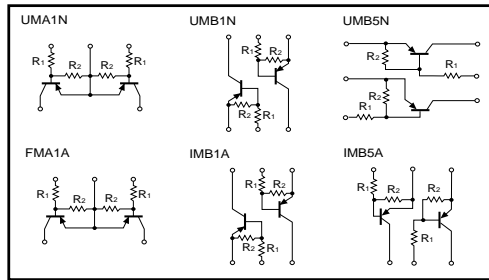
*1 120mW per element must not be exceeded.

*2 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	UMA1N	UMB1N	UMB5N	FMA1A	IMB1A	IMB5A
Package	UMT5	UMT6	UMT6	SMT5	SMT6	SMT6
Marking	A1	B1	B5	A1	B1	B5
Code	TR	TN	TR	T148	T110	T110
Basic ordering unit (pieces)	3000	3000	3000	3000	3000	3000

●Circuit schematic



●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V _{l(off)}	-	-	-0.5	V	V _{cc} = -5V, I _o = -100μA
	V _{l(on)}	-3	-	-	V	V _o = -0.2V, I _o = -5mA
Output voltage	V _{o(on)}	-	-0.1	-0.3	V	I _o /I _c = -0.5mA/-10mA
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	-	-

●External dimensions (Units : mm)

