

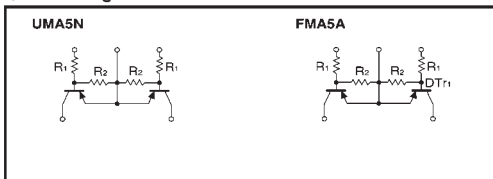
Emitter common (dual digital transistors)

UMA5N / FMA5A

●Features

- 1) Two DTA123Js in a UMT or SMT package.

●Circuit diagrams



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	-50	V
Input voltage	V _{IN}	-12	V
		5	
Output current	I _O	-100	mA
Power dissipation	P _d	150 (TOTAL)	mW *
		300 (TOTAL)	
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55~+150	°C

* Do not exceed 120mW per element for the UMA5N.
Do not exceed 200mW per element for the FMA5A.

●Package, marking, and packaging specifications

Part No.	UMA5N	FMA5A
Package	UMT5	SMT5
Marking	A5	A5
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●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 =-100 μA
	V _{I (on)}	-1.1	—	—		V _O =-0.3V, I _O =-5mA
Output voltage	V _{O (on)}	—	-0.1	-0.3	V	I _O /I _I =-5mA/0.25mA
Input current	I _I	—	—	-3.6	mA	V _I =-5V
Output current	I _{O (off)}	—	—	-0.5	μA	V _{CC} =-50V, V _I =0V
DC current gain	G _I	80	—	—	—	V _O =-5V, I _O =-10mA
Input resistance	R _I	1.54	2.2	2.86	kΩ	—
Transition frequency	f _T	—	250	—	MHz	V _{CE} =-10V, I _E =5mA, f=100MHz *
Resistance ratio	R ₂ /R ₁	17	21	26	—	—

*Transition frequency of the device.

(96-384-A123J)

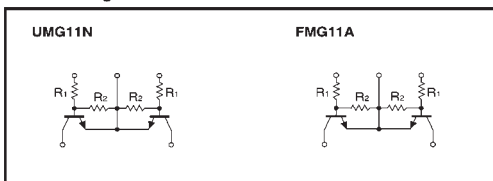
Emitter common (dual digital transistors)

UMG11N / FMG11A

●Features

- 1) Two DTA123Js in a UMT or SMT package.

●Circuit diagrams



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	50	V
Input voltage	V _{IN}	12	V
		5	
Output current	I _O	100	mA
Power dissipation	P _d	150 (TOTAL)	mW *1
		300 (TOTAL)	
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.	UMG11N	FMG11A
Package	UMT5	SMT5
Marking	G11	G11
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●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 =100 μA
	V _{I (on)}	1.1	—	—		V _O =0.3V, I _O =5mA
Output voltage	V _{O (on)}	—	0.1	0.3	V	I _O =5mA, I _I =0.25mA
Input current	I _I	—	—	3.6	mA	V _I =5V
Output current	I _{O (off)}	—	—	0.5	μA	V _{CC} =50V, V _I =0V
DC current gain	G _I	80	—	—	—	I _O =10mA, V _O =5V
Input resistance	R _I	—	2.2	—	kΩ	—
Transition frequency	f _T	—	250	—	MHz	V _{CE} =10V, I _E =-5mA, f=100MHz *
Resistance ratio	R ₂ /R ₁	17	21	26	—	—

*Transition frequency of the device.

(94S-813-C123J)