

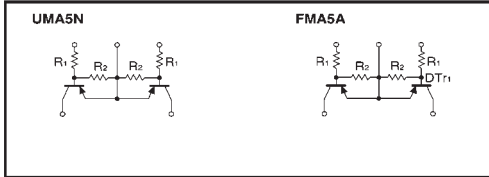
Emitter common (dual digital transistors)

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 5	V
Output current	I _O	−100	mA
Power dissipation	P _d	150 (TOTAL) 300 (TOTAL)	mW *
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	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)

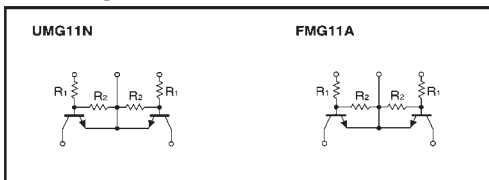
Emitter common (dual digital transistors)

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 5	V
Output current	I _O	100	mA
Power dissipation	P _d	150 (TOTAL) 300 (TOTAL)	mW *1 *2
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	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)