

# Emitter common (dual digital transistors)

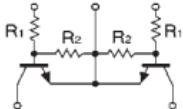
## UMG11N / FMG11A

### ●Features

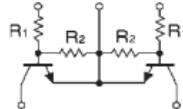
- Two DTA123Js in a UMT or SMT package.

### ●Circuit diagrams

UMG11N



FMG11A



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

Parameter	Symbol	Limits	Unit
Supply voltage	V <sub>cc</sub>	50	V
Input voltage	V <sub>IN</sub>	12	V
		5	
Output current	I <sub>o</sub>	100	mA
Power dissipation	P <sub>d</sub>	150 (TOTAL)	mW *1
		300 (TOTAL)	
Storage temperature	T <sub>tsg</sub>	-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 ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V <sub>i</sub> (off)	—	—	0.5	V	V <sub>cc</sub> =5V , I <sub>o</sub> =100 μA
	V <sub>i</sub> (on)	1.1	—	—		V <sub>o</sub> =0.3V , I <sub>o</sub> =5mA
Output voltage	V <sub>o</sub> (on)	—	0.1	0.3	V	I <sub>o</sub> =5mA , I <sub>i</sub> =0.25mA
Input current	I <sub>i</sub>	—	—	3.6	mA	V <sub>i</sub> =5V
Output current	I <sub>o</sub> (off)	—	—	0.5	μA	V <sub>cc</sub> =50V , V <sub>i</sub> =0V
DC current gain	G <sub>i</sub>	80	—	—	—	I <sub>o</sub> =10mA , V <sub>o</sub> =5V
Input resistance	R <sub>i</sub>	—	2.2	—	kΩ	—
Transition frequency	f <sub>T</sub>	—	250	—	MHz	V <sub>ce</sub> =10V , I <sub>e</sub> =-5mA , f=100MHz *
Resistance ratio	R <sub>2</sub> /R <sub>1</sub>	17	21	26	—	—