

EMG11 / UMG11N / FMG11A

Transistors

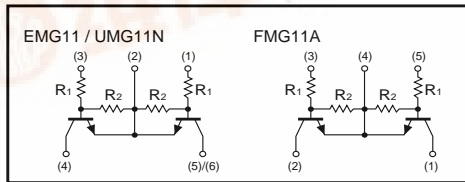
Emitter common (dual digital transistors)

EMG11 / UMG11N / FMG11A

●Features

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

●Equivalent circuit



●Package, marking, and packaging specifications

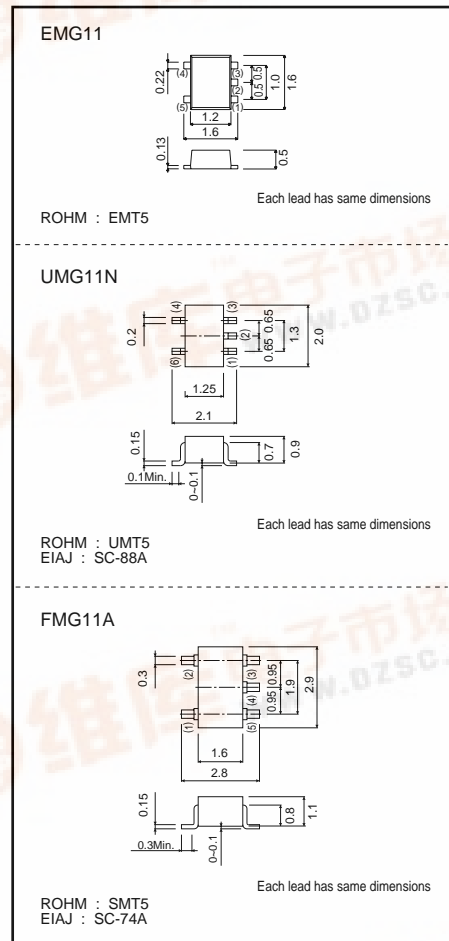
Type	EMG11	UMG11N	FMG11A
Package	EMT5	UMT5	SMT5
Marking	G11	G11	G11
Code	T2R	TR	T148
Basic ordering unit (pieces)	8000	3000	3000

●Absolute maximum ratings (Ta = 25°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>stg</sub>	-50~+150	°C

\*1 120mW per element must not be exceeded.  
\*2 200mW per element must not be exceeded.

●External dimensions (Units : mm)



●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V <sub>I (off)</sub>	-	-	0.5	V	V <sub>CC</sub> =5V, I <sub>O</sub> =100μA V <sub>O</sub> =0.3V, I <sub>O</sub> =5mA
	V <sub>I (on)</sub>	1.1	-	-		
Output voltage	V <sub>O (on)</sub>	-	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 (off)</sub>	-	-	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	-	-

\*Transition frequency of the device.