

Transistors

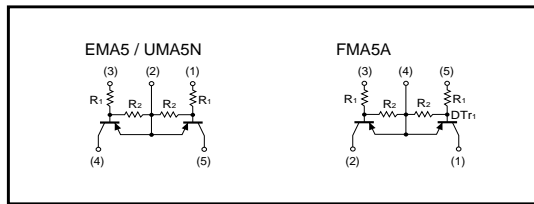
# Emitter common (dual digital transistors)

## EMA5 / UMA5N / FMA5A

●Features

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

●Equivalent circuit



●Packaging, marking, and packaging specifications

Type	EMA5	UMA5N	FMA5A
Package	EMT5	UMT5	SMT5
Marking	A5	A5	A5
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	EMA5 / UMA5N	150 (TOTAL)	mW *
	FMA5A	300 (TOTAL)	
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55~+150	°C

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

●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> /I <sub>I</sub> =-5mA/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	-	-	-	V <sub>O</sub> =-5V, I <sub>O</sub> =-10mA
Input resistance	R <sub>1</sub>	1.54	2.2	2.86	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.

●External dimensions (Units : mm)

