

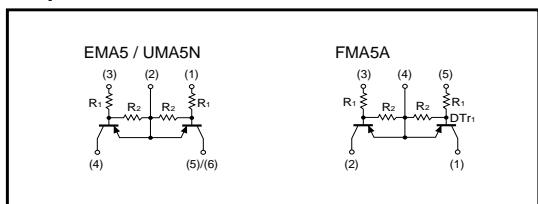
# Emitter common (dual digital transistors)

## EMA5 / UMA5N / FMA5A

### ●Features

- 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

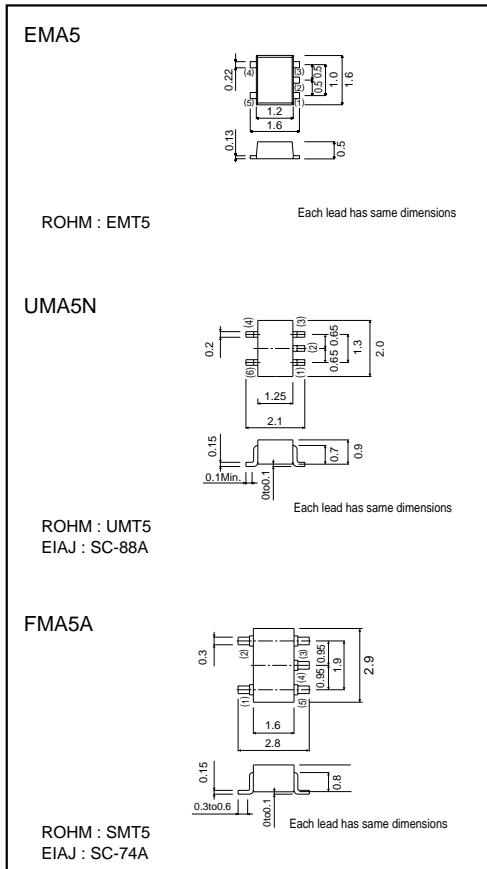
### ●Absolute maximum ratings ( $T_a=25^\circ\text{C}$ )

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 120m per element for the UMA5N.

Do not exceed 200mW per element for the FMA5A.

### ●External dimensions (Units : mm)



### ●Electrical characteristics ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_i$ (off)	—	—	-0.5	V	$V_{cc}=-5\text{V}$ , $I_o=-100\mu\text{A}$
	$V_i$ (on)	-1.1	—	—		$V_o=-0.3\text{V}$ , $I_o=-5\text{mA}$
Output voltage	$V_o$ (on)	—	-0.1	-0.3	V	$I_o/I_{l1}=-5\text{mA}/0.25\text{mA}$
Input current	$I_i$	—	—	-3.6	mA	$V_i=-5\text{V}$
Output current	$I_o$ (off)	—	—	-0.5	μA	$V_{cc}=-50\text{V}$ , $V_i=0\text{V}$
DC current gain	$G_i$	80	—	—		$V_o=-5\text{V}$ , $I_o=-10\text{mA}$
Input resistance	$R_i$	1.54	2.2	2.86	kΩ	—
Transition frequency	$f_T$	—	250	—	MHz	$V_{ce}=-10\text{V}$ , $I_o=5\text{mA}$ , $f=100\text{MHz}$
Resistance ratio	$R_2 / R_1$	17	21	26	—	—

\*Transition frequency of the device.