

Transistors

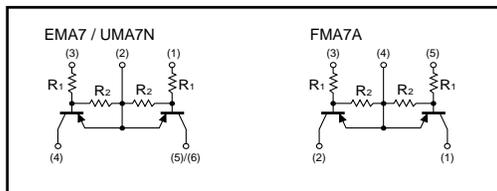
Emitter common (dual digital transistors)

EMA7 / UMA7N / FMA7A

●Features

- 1) Two DTA143X chips in a EMT or UMT or SMT package.

●Equivalent circuit



●Package, marking, and packaging specifications

Type	EMA7	UMA7N	FMA7A
Package	EMT5	UMT5	SMT5
Marking	A7	A7	A7
Code	T2R	TR	T148
Basic ordering unit (pieces)	8000	3000	3000

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	-50	V
Input voltage	V _{IN}	-20	V
		7	
Output current	I _O	-100	mA
Power dissipation	EMA7 / UMA7N	150(TOTAL)	mW *1
	FMA7A	300(TOTAL)	
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55~+150	°C

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

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V _{I (off)}	-	-	-0.3	V	V _{CC} =-5V, I _O =-100μA
	V _{I (on)}	-2.5	-	-		V _O =-0.3V, I _O =-20mA
Output voltage	V _{O (on)}	-	-0.1	-0.3	V	I _O /I _I =-10mA/-0.5mA
Input current	I _I	-	-	-1.8	mA	V _I =-5V
Output current	I _{O (off)}	-	-	-0.5	μA	V _{CC} =-50V, V _I =0V
DC current gain	G _I	30	-	-	-	V _O =-5V, I _O =-10mA
Transition frequency	f _T	-	250	-	MHz	V _{CE} =-10V, I _E =5mA, f=100MHz *
Input resistance	R ₁	3.29	4.7	6.11	kΩ	-
Resistance ratio	R ₂ /R ₁	1.7	2.1	2.6	-	-

*Transition frequency of the device.

●External dimensions (Units : mm)

