

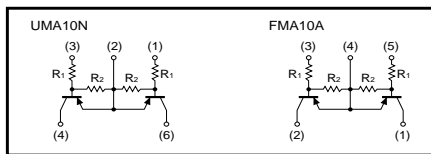
# General purpose (dual digital transistors)

## UMA10N / FMA10A

●Features

- 1) Two DTA113Z chips in a UMT package.

●Equivalent circuits



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V <sub>CC</sub>	-50	V
Input voltage	V <sub>IN</sub>	-10	V
		5	
Output current	I <sub>O</sub>	-100	mA
Power dissipation	UMA10N	150(TOTAL)	mW *1
	FMA10A	300(TOTAL)	
Junction temperature	T <sub>J</sub>	150	°C
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.

●Package, marking, and packaging specifications

Part No.	UMA10N	FMA10A
Package	UMT5	SMT5
Marking	A10	A10
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V <sub>I(off)</sub>	-	-	-0.3	V	V <sub>CC</sub> =-5V, I <sub>O</sub> =-100μA
	V <sub>I(on)</sub>	-3.0	-	-		V <sub>O</sub> =-0.3V, I <sub>O</sub> =-20mA
Output voltage	V <sub>O(on)</sub>	-	-0.1	-0.3	V	I <sub>O</sub> /I <sub>C</sub> =-10mA/-0.5mA
Input current	I <sub>I</sub>	-	-	-7.2	mA	V=-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>	33	-	-	-	V <sub>O</sub> =-5V, I <sub>O</sub> =-5mA
Input resistance	R <sub>I</sub>	0.7	1.0	1.3	kΩ	-
Resistance ratio	R <sub>2</sub> /R <sub>1</sub>	8	10	12	-	-
Transition frequency	f <sub>r</sub>	-	250	-	MHz	V <sub>CC</sub> =-10V, I <sub>E</sub> =5mA, f=100MHz *2

\*2 Transition frequency of the device.

●External dimensions (Units : mm)

