

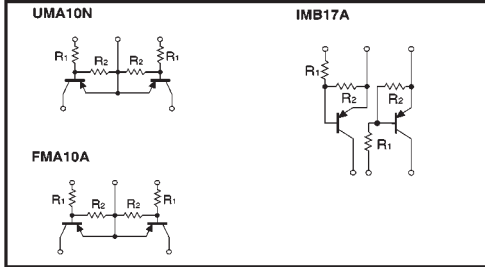
General purpose (dual digital transistors)

UMA10N / FMA10A / IMB17A

●Features

- 1) Two DTA113Z chips in a UMT or SMT package.

●Circuit diagrams



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	−50	V
Input voltage	V _{IN}	−10 5	V
Output current	I _O	−100	mA
Power dissipation	P _d	150 (TOTAL)	mW
		300 (TOTAL)	
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	−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	IMB17A
Package	UMT5	SMT5	SMT6
Marking	A10	A10	B17
Code	TR	T148	T108
Basic ordering unit (pieces)	3000	3000	3000

●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 =−100 μA
	V _{I (on)}	−3.0	—	—	V	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	—	—	−7.2	mA	V _I =−5V
Output current	I _{O (off)}	—	—	−0.5	μA	V _{CC} =−50V, V _I =0V
DC current gain	G _I	33	—	—	—	V _O =−5V, I _O =−5mA
Input resistance	R _I	0.7	1.0	1.3	kΩ	—
Resistance ratio	R ₂ /R _I	8	10	12	—	—
Transition frequency	f _r	—	250	—	MHz	V _{CE} =−10V, I _E =5mA, f=100MHz

* Transition frequency of the device.

(96-388-A113Z)

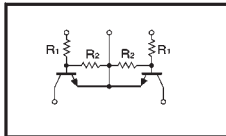
General purpose (dual digital transistors)

UMG10N

●Features

- 1) Two DTC113Z chips in a UMT package.

●Circuit diagram



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	50	V
Input voltage	V _{IN}	10 −5	V
Output current	I _O	100	mA
Power dissipation	P _d	150 (TOTAL)	mW
Storage temperature	T _{stg}	−50~+150	°C

* 120mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	UMG10N
Package	UMT5
Marking	G10
Code	TR
Basic ordering unit (pieces)	3000

●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 =100 μA
	V _{I (on)}	3	—	—	V	V _O =0.3V, I _O =20mA
Output voltage	V _{O (on)}	—	0.1	0.3	V	I _O =10mA, I _I =0.5mA
Input current	I _I	—	—	7.2	mA	V _I =5V
Output current	I _{O (off)}	—	—	0.5	μA	V _{CC} =50V, V _I =0V
DC current gain	G _I	33	—	—	—	I _O =5mA, V _O =5V
Input resistance	R _I	0.7	1	1.3	kΩ	—
Resistance ratio	R ₂ /R _I	8	10	12	—	—
Transition frequency	f _r	—	250	—	MHz	V _{CE} =10V, I _E =−5mA, f=100MHz

* Transition frequency of the device.

(94S-811-C113Z)