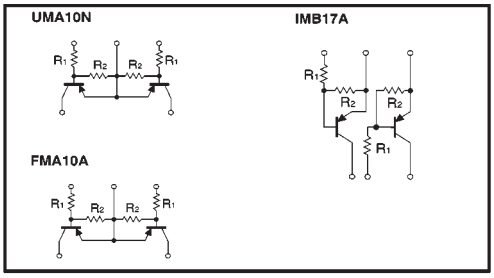
General purpose (dual digital transistors)
UMA10N / FMA10A / IMB17A

●**Features**
1） Two DTA113Z chips in a UMT or SMT package.

●**Circuit diagrams**



●**Absolute maximum ratings**（Ta=25℃）

Parameter		Symbol	Limits	Unit
Supply voltage		Vcc	−50	V
Input voltage		VIN	−10	V
			5	
Output current		Io	−100	mA
Power dissipation	UMA10N	Pd	150 (TOTAL)	mW ∗1
	FMA10A, IMB17A		300 (TOTAL)	∗2
Junction temperature		Tj	150	℃
Storage temperature		Tstg	−50～+150	℃

∗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℃）

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	VI (off)	—	—	−0.3	V	VCC=−5V, Io=−100 μA
	VI (on)	−3.0	—	—		Vo=−0.3V, Io=−20mA
Output voltage	Vo (on)	—	−0.1	−0.3	V	Io/II=−10mA/−0.5mA
Input current	II	—	—	−7.2	mA	VI=−5V
Output current	Io (off)	—	—	−0.5	μA	VCC=−50V, VI=0V
DC current gain	GI	33	—	—	—	Vo=−5V, Io=−5mA
Input resistance	R1	0.7	1.0	1.3	kΩ	—
Resistance ratio	R2/R1	8	10	12	—	—
Transition frequency	fT	—	250	—	MHz	VCE=−10V, IE=5mA, f=100MHz ∗

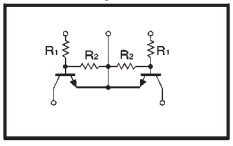
∗ Transition frequency of the device.

(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℃）

Parameter	Symbol	Limits	Unit
Supply voltage	Vcc	50	V
Input voltage	VIN	10	V
		−5	
Output current	Io	100	mA ∗
Power dissipation	Pd	150 (TOTAL)	mW
Storage temperature	Tstg	−50～+150	℃

∗ 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℃）

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	VI (off)	—	—	0.3	V	VCC=5V, Io=100 μA
	VI (on)	3	—	—		Vo=0.3V, Io=20mA
Output voltage	Vo (on)	—	0.1	0.3	V	Io=10mA, II=0.5mA
Input current	II	—	—	7.2	mA	VI=5V
Output current	Io (off)	—	—	0.5	μA	VCC=50V, VI=0V
DC current gain	GI	33	—	—	—	Io=5mA, Vo=5V
Input resistance	R1	0.7	1	1.3	kΩ	—
Resistance ratio	R2/R1	8	10	12	—	—
Transition frequency	fT	—	250	—	MHz	VCE=10V, IE=−5mA, f=100MHz ∗

∗ Transition frequency of the device.

(94S-811-C113Z)