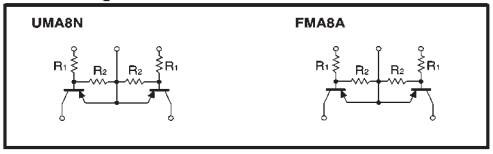
Emiter common (dual digital transistors)
UMA8N / FMA8A

●Features
1） Two DTA114Y 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	−40	V
		6	
Output current	Io	−100	mA
Power dissipation	Pd	300 (TOTAL)	mW ＊
Storage temperature	Tstg	−50～+150	℃

＊ 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	UMA8A	FMA8A
Package	UMT5	SMT5
Marking	A8	A8
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●Electrical characteristics（Ta=25℃）

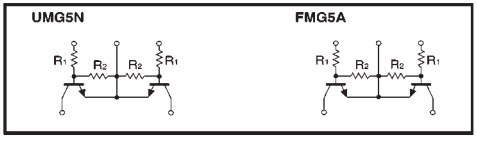
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	VI (off)	—	—	−0.3	V	Vcc=−5V , Io=−100μA
	VI (on)	−1.4	—	—		Vo=−0.3V , Io=−1mA
Output voltage	VO (on)	—	−0.1	−0.3	V	Io=−10mA , II=−0.5mA
Input current	II	—	—	−0.88	mA	VI=−5V
Output current	Io (off)	—	—	−0.5	μA	Vcc=−50V , VI=0V
DC current gain	GI	68	—	—	—	Io=−5mA , Vo=−5V
Input resistance	R1	—	10	—	kΩ	—
Resistance ratio	R2/R1	3.7	4.7	5.7	—	—

(94S-781-A114Y)

Emiter common (dual digital transistors)
UMG5N / FMG5A

●Features
1） Two DTC114Y 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	40	V	
			−6		
Output current		Io	100	mA	
Power dissipation	UMG5N	Pd	150 (TOTAL)	mW	＊1
	FMG5A		300 (TOTAL)		＊2
Junction temperature		Tj	150	℃	
Storage temperature		Tstg	−55～+150	℃	

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

●Package, marking, and packaging specifications

Part No.	UMG5N	FMG5A
Package	UMT5	SMT5
Marking	G5	G5
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●Electrical characteristics（Ta=25℃）

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	VI (off)	—	—	0.3	V	Vcc=5V , Io=100μA
	VI (on)	1.4	—	—		Vo=0.3V , Io=1mA
Output voltage	VO (on)	—	0.1	0.3	V	Io=5mA , II=0.25mA
Input current	II	—	—	0.88	mA	VI=5V
Output current	Io (off)	—	—	0.5	μA	Vcc=50V , VI=0V
DC current gain	GI	68	—	—	—	Io=5mA , Vo=5V
Transition frequency	fT	—	250	—	MHz	VCE=−10V , IE=5mA, f=100MHz ＊
Input resistance	R1	7	10	13	kΩ	—
Resistance ratio	R2/R1	3.7	4.7	5.7	—	—

＊ Transition frequency of the device.

(94S-799-C114Y)