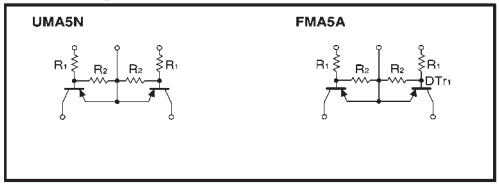
Emitter common (dual digital transistors)
UMA5N / FMA5A

●**Features**
1) Two DTA123Js in a UMT or SMT package.

●**Circuit diagrams**



●**Absolute maximum ratings** (Ta=25℃)

Parameter		Symbol	Limits	Unit
Supply voltage		V_{CC}	−50	V
Input voltage		V_{IN}	−12	V
			5	
Output current		I_O	−100	mA
Power dissipation	UMA5N	Pd	150 (TOTAL)	mW ＊
	FMA5A		300 (TOTAL)	
Junction temperature		Tj	150	℃
Storage temperature		Tstg	−55～+150	℃

＊ Do not exceed 120mW per element for the UMA5N.
Do not exceed 200mW per element for the FMA5A.

●**Package, marking, and packaging specifications**

Part No.	UMA5N	FMA5A
Package	UMT5	SMT5
Marking	A5	A5
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●**Electrical characteristics** (Ta=25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	—	—	−0.5	V	V_{CC}=−5V , I_O=−100μA
	$V_{I(on)}$	−1.1	—	—		V_O=−0.3V , I_O=−5mA
Output voltage	$V_{O(on)}$	—	−0.1	−0.3	V	I_O/I_I=−5mA/0.25mA
Input current	I_I	—	—	−3.6	mA	V_I=−5V
Output current	$I_{O(off)}$	—	—	−0.5	μA	V_{CC}=−50V , V_I=0V
DC current gain	G_I	80	—	—	—	V_O=−5V , I_O=−10mA
Input resistance	R_1	1.54	2.2	2.86	kΩ	—
Transition frequency	f_T	—	250	—	MHz	V_{CE}=−10V, I_E=5mA , f=100MHz ＊
Resistance ratio	R_2/R_1	17	21	26	—	—

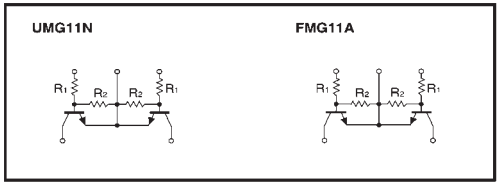
＊Transition frequency of the device.

(96-384-A123J)

Emitter common (dual digital transistors)
UMG11N / FMG11A

●**Features**
1) Two DTA123Js in a UMT or SMT package.

●**Circuit diagrams**



●**Absolute maximum ratings** (Ta=25℃)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	50	V
Input voltage	V_{IN}	12	V
		5	
Output current	I_O	100	mA
Power dissipation	Pd	150 (TOTAL)	mW ＊1
		300 (TOTAL)	＊2
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.	UMG11N	FMG11A
Package	UMT5	SMT5
Marking	G11	G11
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●**Electrical characteristics** (Ta=25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	—	—	0.5	V	V_{CC}=5V , I_O=100μA
	$V_{I(on)}$	1.1	—	—		V_O=0.3V , I_O=5mA
Output voltage	$V_{O(on)}$	—	0.1	0.3	V	I_O=5mA , I_I=0.25mA
Input current	I_I	—	—	3.6	mA	V_I=5V
Output current	$I_{O(off)}$	—	—	0.5	μA	V_{CC}=50V , V_I=0V
DC current gain	G_I	80	—	—	—	I_O=10mA , V_O=5V
Input resistance	R_1	—	2.2	—	kΩ	—
Transition frequency	f_T	—	250	—	MHz	V_{CE}=10V, I_E=−5mA , f=100MHz ＊
Resistance ratio	R_2/R_1	17	21	26	—	—

＊Transition frequency of the device.

(94S-813-C123J)