

Emitter common (dual digital transistors)

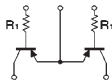
UMA6N / FMA6A

●Features

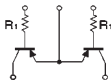
1) Two DTA114T chips in a UMT or SMT package.

●Circuit diagrams

UMA6N



FMA6A



●Absolute maximum ratings ($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CB0}	-50	V
Collector-emitter voltage	V_{CE0}	-50	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_c	-100	mA
Collector power dissipation	UMA6N	150 (TOTAL)	mW *1
	FMA6A	300 (TOTAL)	
Junction temperature	T_j	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55~+150	$^{\circ}\text{C}$

*1 120mW per element must not be exceeded.

*2 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	UMA6A	FMA6A
Package	UMT5	SMT5
Marking	A6	A6
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●Electrical characteristics ($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CB0}	-50	—	—	V	$I_c = -50 \mu\text{A}$
Collector-emitter breakdown voltage	BV_{CE0}	-50	—	—	V	$I_c = -1\text{mA}$
Emitter-base breakdown voltage	BV_{EB0}	-5	—	—	V	$I_E = -50 \mu\text{A}$
Collector cutoff current	I_{CB0}	—	—	-0.5	μA	$V_{CB} = -50\text{V}$
Emitter cutoff current	I_{EB0}	—	—	-0.5	μA	$V_{EB} = -4\text{V}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.3	V	$I_c/I_B = -5\text{mA}/-0.5\text{mA}$
DC current transfer ratio	h_{FE}	100	250	600	—	$V_{CE}/I_c = -5\text{V}/I_c = -1\text{mA}$
Transition frequency	f_T	—	250	—	MHz	$V_{EB} = 10\text{V}$, $I_E = -5\text{mA}$, $f = 100\text{MHz}$ *
Input resistance	R_1	32.9	47	61.1	k Ω	—