

General purpose (dual digital transistors)

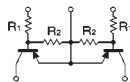
UMA10N / FMA10A / IMB17A

●Features

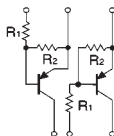
1) Two DTA113Z chips in a UMT or SMT package.

●Circuit diagrams

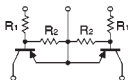
UMA10N



IMB17A



FMA10A



●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	—	—	-0.3	V	$V_{CC} = -5V, I_o = -100 \mu A$
	$V_{I(on)}$	-3.0	—	—		$V_o = -0.3V, I_o = -20mA$
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_1	0.7	1.0	1.3	k Ω	—
Resistance ratio	R_2/R_1	8	10	12	—	—
Transition frequency	f_r	—	250	—	MHz	$V_{CE} = -10V, I_E = 5mA, f = 100MHz$ *

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	-50	V
Input voltage	V_{IN}	-10	V
		5	
Output current	I_o	-100	mA
Power dissipation	UMA10N	150 (TOTAL)	mW
	FMA10A, IMB17A	300 (TOTAL)	
			*1
			*2
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