

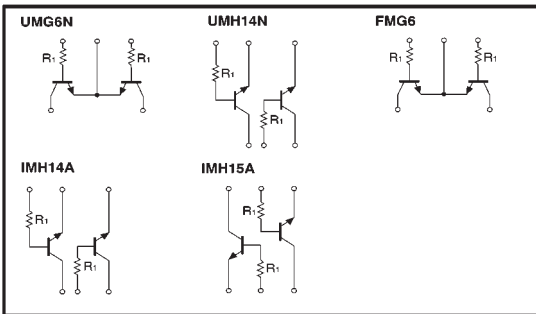
General purpose (dual digital transistors)

UMG6N / UMH14N / FMG6A / IMH14A / IMH15A

● Features

1) Two DTC114T chips in a UMT or SMT package.

● Circuit diagrams



● Electrical characteristics (Ta=25°C)

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

● Absolute maximum ratings (Ta=25°C)

Parameter		Symbol	Limits	Unit
Collector-base voltage		V_{CBO}	50	V
Collector-emitter voltage		V_{CEO}	50	V
Emitter-base voltage		V_{EBO}	5	V
Collector current		I_C	100	mA
Collector power dissipation	UMG6N, UMH14N	P_C	150 (TOTAL)	mW
	FMG6A, IMH14A, IMH15A		300 (TOTAL)	
Junction temperature		T_J	150	°C
Storage temperature		T_{stg}	-55~+150	°C

● Package, marking, and packaging specifications

Part No.	UMG6N	UMH14N	FMG6A	IMH14A	IMH15A
Package	UMT5	UMT6	SMT5	SMT6	SMT6
Marking	G6	H14	G6	H14	H15
Code	TR	TR	T148	T108	T110
Basic ordering unit (pieces)	3000	3000	3000	3000	3000