

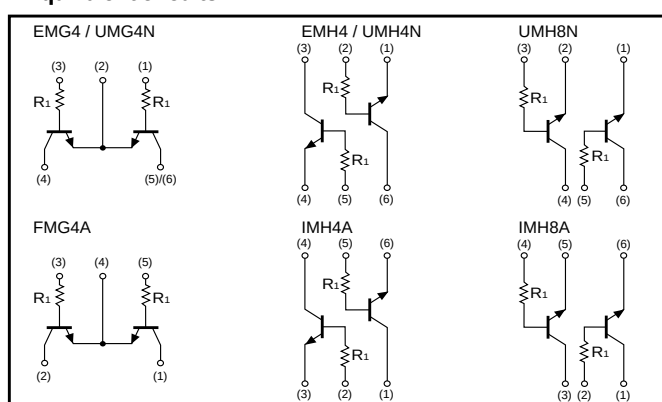
General purpose (dual digital transistors)

EMG4 / EMH4 / UMG4N / UMH4N / UMH8N FMG4A / IMH4A / IMH8A

●Features

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

●Equivalent circuits



●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
Power dissipation	EMG4 / EMH4 / UMG4N / UMH4N / UMH8N FMG4A / IMH4A / IMH8A	P_d 150(TOTAL)	mW *1
		300(TOTAL)	mW *2
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55~+150	°C

*1 120mW per element must not be exceeded.

*2 200mW per element must not be exceeded.

●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	$I_C/I_E=10mA/1mA$
DC current transfer ratio	h_{FE}	100	250	600	—	$V_{CE}=5V, I_C=1mA$
Transition frequency	f_T	—	250	—	MHz	$V_{CE}=10V, I_E=-5mA, f=100MHz$ *
Input resistance	R_i	7	10	13	k Ω	—

*Transition frequency of the device.

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Transistors

●Package, marking, and packaging specifications

Type	EMG4	EMH4	UMG4N	UMH4N	UMH8N	FMG4A	IMH4A	IMH8A
Package	EMT5	EMT5	UMT5	UMT6	UMT6	SMT5	SMT6	SMT6
Marking	G4	H4	G4	H4	H8	G4	H4	H8
Code	T2R	T2R	TR	TN	TR	T148	T110	T108
Basic ordering unit (pieces)	8000	8000	3000	3000	3000	3000	3000	3000

●External dimensions (Units : mm)

