

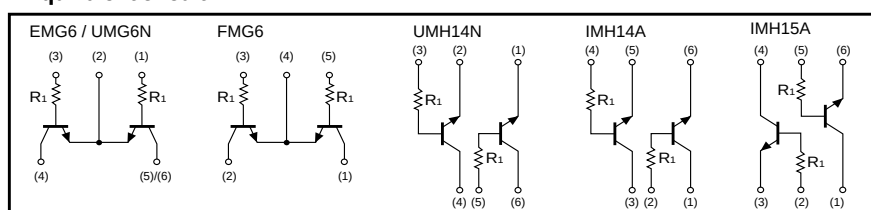
General purpose (dual digital transistors)

EMG6 / UMG6N / UMH14N / FMG6A / IMH14A / IMH15A

●Features

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

●Equivalent circuit



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

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	EMG6 / UMG6N / UMH14N	150(TOTAL)	mW
	FMG6A / IMH14A / IMH15A	300(TOTAL)	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	$-55 \sim +150$	$^\circ\text{C}$

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

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

* Transition frequency of the device.

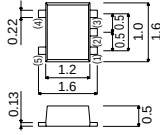
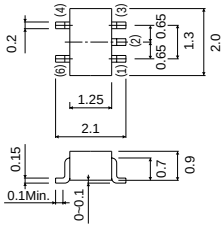
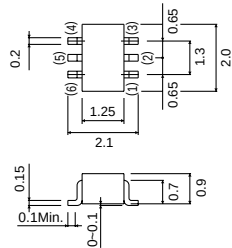
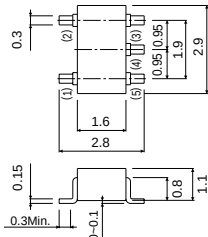
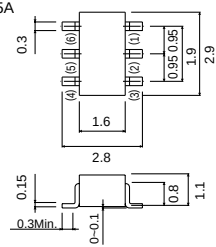
●Package, marking, and packaging specifications

Type	EMG6	UMG6N	UMH14N	FMG6A	IMH14A	IMH15A
Package	EMT5	UMT6	UMT6	SMT5	SMT6	SMT6
Marking	G6	G6	H14	G6	H14	H15
Code	T2R	TR	TR	T148	T108	T110
Basic ordering unit (pieces)	8000	3000	3000	3000	3000	3000

EMG6 / UMG6N / UMH14N / FMG6A / IMH14A / IMH15A

Transistors

●External dimensions (Units : mm)

EMG6  ROHM : EMT5 Each lead has same dimensions	UMG6N  ROHM : UMT5 EIAJ : SC-88A Each lead has same dimensions
UMH14N  ROHM : UMT6 EIAJ : SC-88 Each lead has same dimensions	FMG6A  ROHM : SMT5 EIAJ : SC-74A Each lead has same dimensions
IMH14A / IMH15A  ROHM : SMT6 EIAJ : SC-74 Each lead has same dimensions	