

EMG6 / UMG6N / UMH14N / FMG6A / IMH14A / IMH15A

Transistors

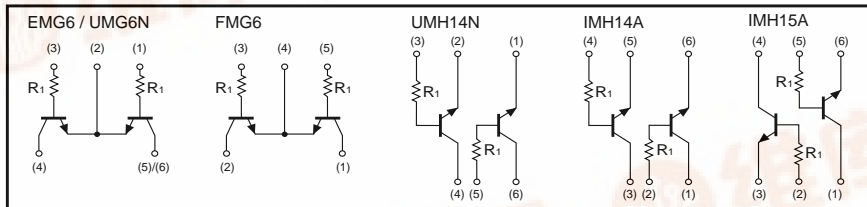
General purpose (dual digital transistors)

EMG6 / UMG6N / UMH14N / FMG6A / IMH14A / IMH15A

●Features

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

●Equivalent circuit



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V <sub>CB0</sub>	50	V
Collector-emitter voltage	V <sub>CE0</sub>	50	V
Emitter-base voltage	V <sub>EB0</sub>	5	V
Collector current	I <sub>c</sub>	100	mA
Collector power dissipation	EMG6 / UMG6N / UMH14N	150(TOTAL)	mW
	FMG6A / IMH14A / IMH15A	300(TOTAL)	
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55~+150	°C

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV <sub>CB0</sub>	50	-	-	V	I <sub>c</sub> =50μA
Collector-emitter breakdown voltage	BV <sub>CE0</sub>	50	-	-	V	I <sub>c</sub> =1mA
Emitter-base breakdown voltage	BV <sub>EB0</sub>	5	-	-	V	I <sub>E</sub> =50μA
Collector cutoff current	I <sub>CB0</sub>	-	-	0.5	μA	V <sub>CB</sub> =50V
Emitter cutoff current	I <sub>EB0</sub>	-	-	0.5	μA	V <sub>EB</sub> =4V
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	-	-	0.3	V	I <sub>c</sub> /I <sub>B</sub> =5mA/0.5mA
DC current transfer ratio	h <sub>FE</sub>	100	250	600	-	V <sub>CE</sub> /I <sub>c</sub> =5V/1mA
Transition frequency	f <sub>T</sub>	-	250	-	MHz	V <sub>CE</sub> =10V, I <sub>E</sub> =-5mA, f=100MHz *
Input resistance	R <sub>1</sub>	32.9	47	61.1	kΩ	-

\*Transition frequency of the device.

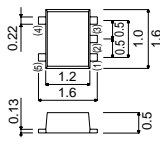
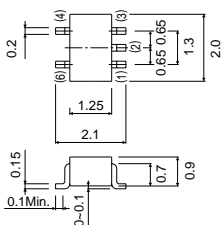
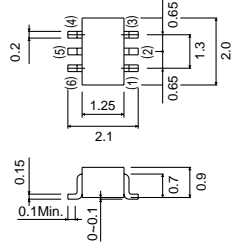
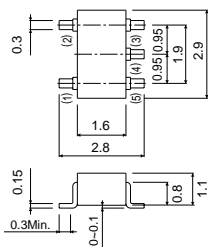
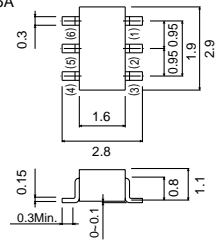
●Package, marking, and packaging specifications

Type	EMG6	UMG6N	UMH14N	FMG6A	IMH14A	IMH15A
Package	EMT5	UMT5	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

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### ●External dimensions (Units : mm)

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