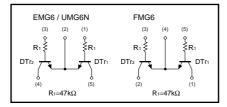
# General purpose (dual digital transistors) **EMG6 / UMG6N / FMG6A**

#### Features

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

# ●Equivalent circuit



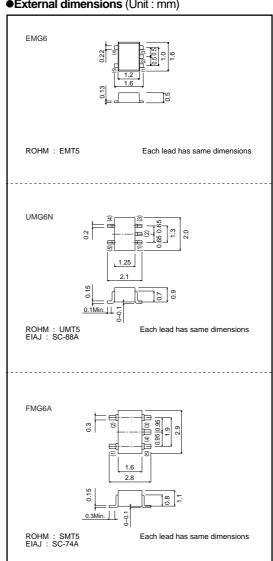
#### ● Absolute maximum ratings (Ta=25°C)

Parameter		Symbol	Limits	Unit	
Collector-base voltage		Vсво	50	V	
Collector-emitter voltage		Vceo	50	V	
Emitter-base voltage		Vево	5	V	
Collector current		lc	100	mA	
Collector power dissipation	EMG6 / UMG6N	Pc	150(TOTAL)	mW	
	FMG6A	10	300(TOTAL)		
Junction temperature		Tj	150	°C	
Storage temperature		Tstg	-55 to +150	°C	

#### •Package, marking, and packaging specifications

Туре	EMG6	UMG6N	FMG6A
Package	EMT5	UMT5	SMT5
Marking	G6	G6	G6
Code	T2R	TR	T148
Basic ordering unit (pieces)	8000	3000	3000

### ●External dimensions (Unit : mm)



# ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-base breakdown voltage	ВУсво	50	-	_	V	Ic=50μA
Collector-emitter breakdown voltage	BVceo	50	-	-	V	Ic=1mA
Emitter-base breakdown voltage	ВУево	5	-	_	V	Iε=50μA
Collector cutoff current	Ісво	-	-	0.5	μΑ	Vcb=50V
Emitter cutoff current	ІЕВО	-	-	0.5	μΑ	V <sub>EB</sub> =4V
Collector-emitter saturation voltage	VcE(sat)	-	-	0.3	V	Ic/I <sub>B</sub> =10mA/1mA
DC current transfer ratio	hfe	100	250	600	-	Vce/lc=5V/1mA
Transition frequency	f⊤	_	250	_	MHz	Vce=10V, Ie= -5mA, f=100MHz *
Input resistance	R <sub>1</sub>	32.9	47	61.1	kΩ	-

<sup>\*</sup>Transition frequency of the device.

#### •Electrical characteristics curves

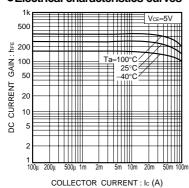


Fig.1 DC current gain vs. collector current

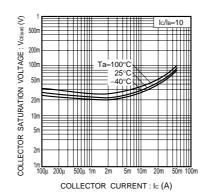


Fig.2 Collector-emitter saturation voltage vs. collector current

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