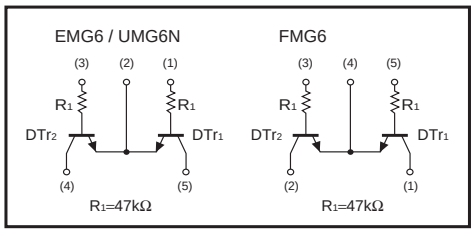
General purpose (dual digital transistors)

EMG6 / UMG6N / FMG6A

●Features

1) Two DTC144T chips in a EMT or UMT or SMT package.

●Equivalent circuit



●Absolute maximum ratings (Ta=25°C)

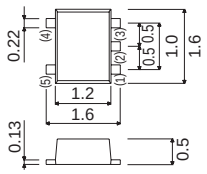
Parameter		Symbol	Limits	Unit
Collector-base voltage		V_{CBO}	50	V
Collector-emitter voltage		V_{CEO}	50	V
Emitter-base voltage		V_{EBO}	5	V
Collector current		I_C	100	mA
Collector power dissipation	EMG6 / UMG6N	Pc	150(TOTAL)	mW
	FMG6A		300(TOTAL)	
Junction temperature		Tj	150	°C
Storage temperature		Tstg	−55 to +150	°C

●Package, marking, and packaging specifications

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

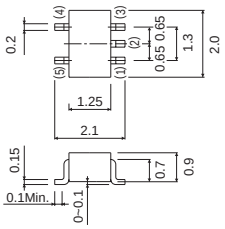
●Dimensions (Unit : mm)

EMG6



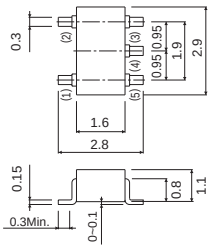
ROHM : EMT5 Each lead has same dimensions

UMG6N



ROHM : UMT5 Each lead has same dimensions
EIAJ : SC-88A

FMG6A



ROHM : SMT5 Each lead has same dimensions
EIAJ : SC-74A

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●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	50	–	–	V	I_C=50μA
Collector-emitter breakdown voltage	BV_{CEO}	50	–	–	V	I_C=1mA
Emitter-base breakdown voltage	BV_{EBO}	5	–	–	V	I_E=50μA
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_B=10mA/1mA
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	kΩ	–

＊Transition frequency of the device.

●Electrical characteristics curves

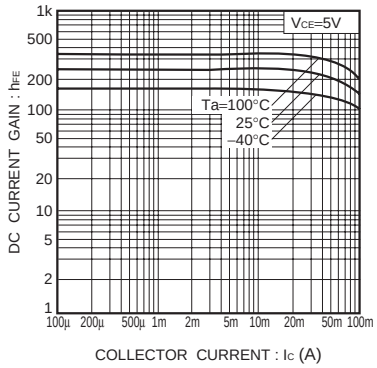


Fig.1 DC current gain vs. collector current

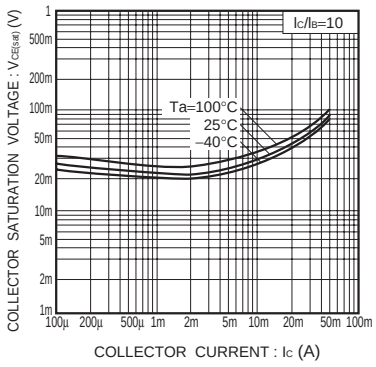


Fig.2 Collector-emitter saturation voltage vs. collector current

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Notes

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ROHM Co.,Ltd. 21 Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585, Japan
TEL : +81-75-311-2121
FAX : +81-75-315-0172

ROHM SEMICONDUCTOR