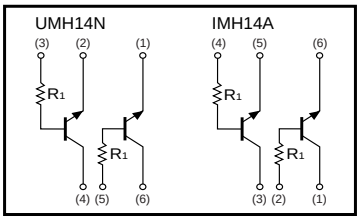
General purpose (dual digital transistors)

UMH14N / IMH14A

●Features

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

●Equivalent circuit



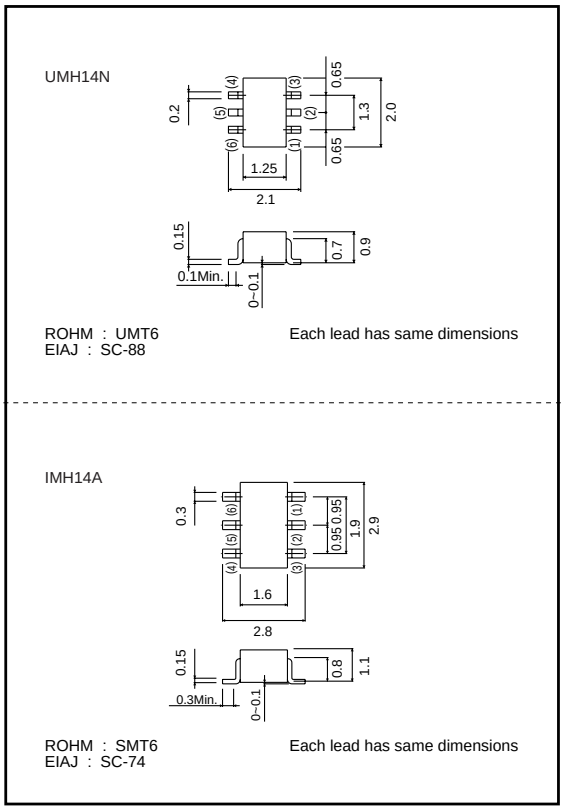
●Package, marking, and packaging specifications

Type	UMH14N	IMH14A
Package	UMT6	SMT6
Marking	H14	H14
Code	TR	T108
Basic ordering unit (pieces)	3000	3000

●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	UMH14N	Pc	150(TOTAL)	mW
	IMH14A		300(TOTAL)	
Junction temperature		Tj	150	°C
Storage temperature		Tstg	−55 to +150	°C

●External dimensions (Unit : mm)



●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**

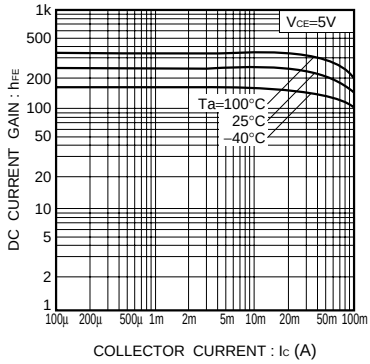


Fig.1 DC current gain vs. collector current

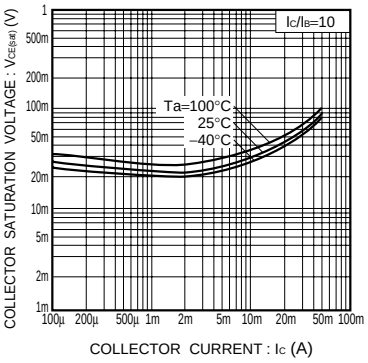


Fig.2 Collector-emitter saturation voltage vs. collector current

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