

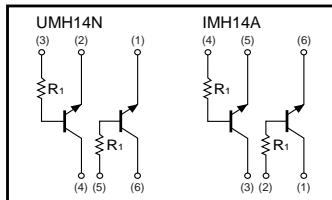
General purpose (dual digital transistors)

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)

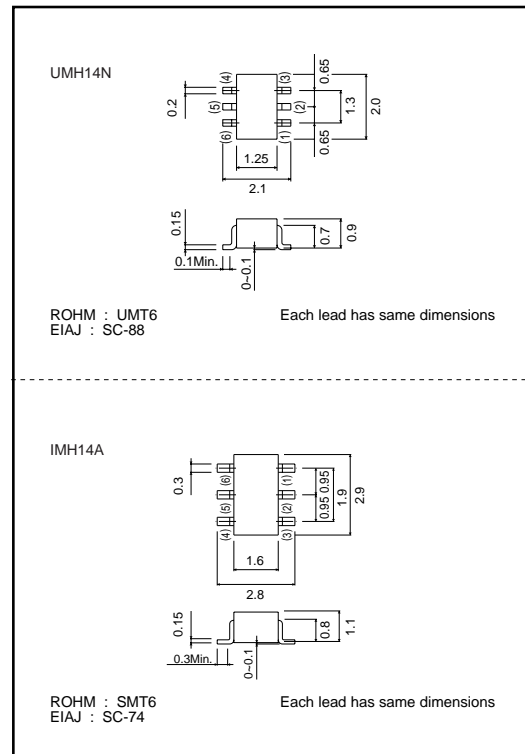
Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{CB0}	50	V
Collector-emitter voltage	V _{CE0}	50	V
Emitter-base voltage	V _{EB0}	5	V
Collector current	I _c	100	mA
Collector power dissipation	P _c	150(TOTAL)	mW
		300(TOTAL)	
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	50	-	-	V	I _c =50μA
Collector-emitter breakdown voltage	BV _{CE0}	50	-	-	V	I _c =1mA
Emitter-base breakdown voltage	BV _{EB0}	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.

●External dimensions (Unit : mm)



Transistors

●Electrical characteristics curves

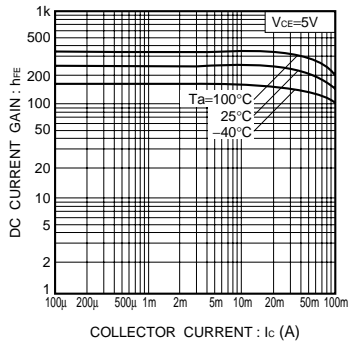


Fig.1 DC current gain vs. collector current

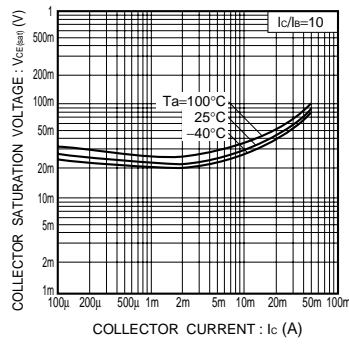


Fig.2 Collector-emitter saturation voltage vs. collector current

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