

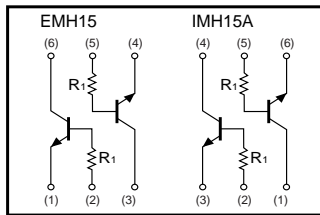
# General purpose (dual digital transistors)

## EMH15 / IMH15A

### ●Features

1) Two DTC114T chips in a EMT 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	$P_C$	150(TOTAL)	mW
		300(TOTAL)	
Junction temperature	$T_J$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

### ●Package, marking, and packaging specifications

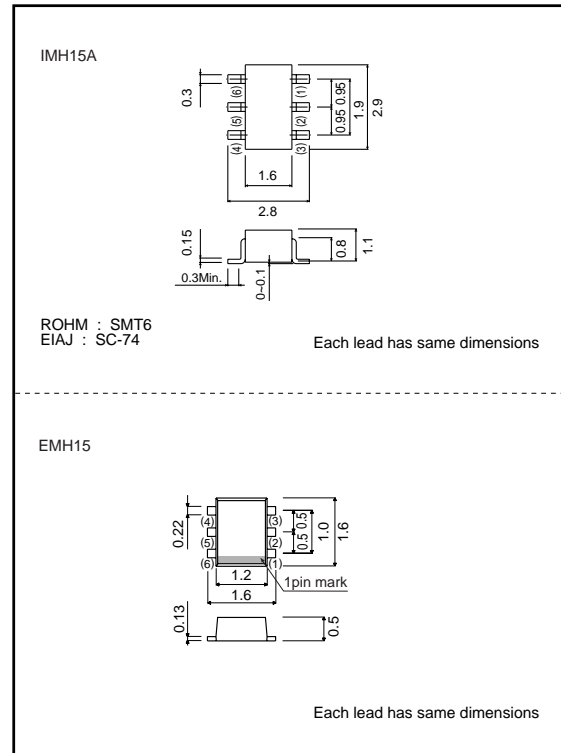
Type	EMH15	IMH15A
Package	EMT6	SMT6
Marking	H15	H15
Code	T2R	T110
Basic ordering unit (pieces)	8000	3000

### ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	$BV_{CBO}$	50	-	-	V	$I_C=50\mu A$
Collector-emitter breakdown voltage	$BV_{CEO}$	50	-	-	V	$I_C=1mA$
Emitter-base breakdown voltage	$BV_{EBO}$	5	-	-	V	$I_E=50\mu A$
Collector cutoff current	$I_{CBO}$	-	-	0.5	$\mu A$	$V_{CB}=50V$
Emitter cutoff current	$I_{EBO}$	-	-	0.5	$\mu A$	$V_{EB}=4V$
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	$k\Omega$	-

\*Transition frequency of the device.

### ●External dimensions (Unit : mm)



Transistors

●Electrical characteristics curves

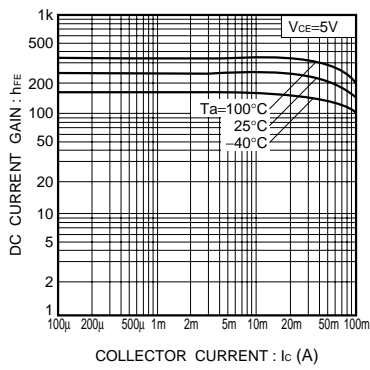


Fig.1 DC current gain vs. collector current

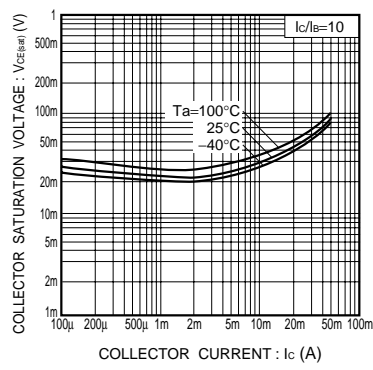


Fig.2 Collector-emitter saturation voltage vs. collector current

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