

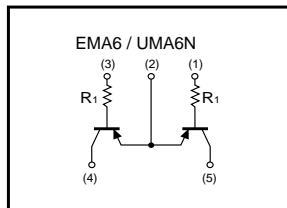
# Emitter common (dual digital transistors)

## EMA6 / UMA6N

### ●Feature

1) Two DTA144T chips in a EMT or UMT package.

### ●Equivalent circuit



### ●Package, marking, and packaging specifications

Type	EMA6	UMA6N
Package	EMT5	UMT5
Marking	A6	A6
Code	T2R	TR
Basic ordering unit (pieces)	8000	3000

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

Parameter	Symbol	Limits	Unit
Collector-base voltage	V <sub>CB0</sub>	-50	V
Collector-emitter voltage	V <sub>CE0</sub>	-50	V
Emitter-base voltage	V <sub>EB0</sub>	-5	V
Collector current	I <sub>c</sub>	-100	mA
Collector power dissipation	P <sub>c</sub>	150(TOTAL)	mW *1
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

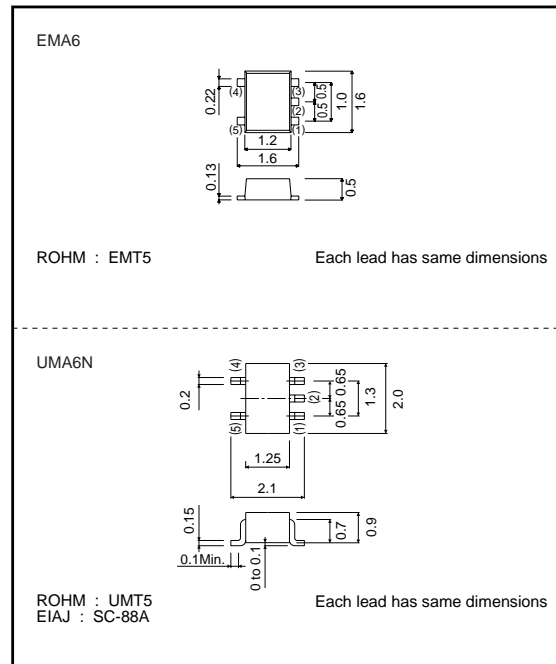
\*1 120mW per element must not be exceeded.

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV <sub>CB0</sub>	-50	-	-	V	I <sub>c</sub> = -50μA
Collector-emitter breakdown voltage	BV <sub>CE0</sub>	-50	-	-	V	I <sub>c</sub> = -1mA
Emitter-base breakdown voltage	BV <sub>EB0</sub>	-5	-	-	V	I <sub>E</sub> = -50μA
Collector cutoff current	I <sub>cB0</sub>	-	-	-0.5	μA	V <sub>CB</sub> = -50V
Emitter cutoff current	I <sub>EB0</sub>	-	-	-0.5	μA	V <sub>EB</sub> = -4V
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	-	-	-0.3	V	I <sub>c</sub> /I <sub>B</sub> = -5mA/ -0.5mA
DC current transfer ratio	h <sub>FE</sub>	100	250	600	-	V <sub>CE</sub> /I <sub>c</sub> = -5V/ -1mA
Transition frequency	f <sub>T</sub>	-	250	-	MHz	V <sub>EB</sub> = -10V, I <sub>E</sub> = 5mA, f = 100MHz *
Input resistance	R <sub>1</sub>	32.9	47	61.1	kΩ	-

\*Transition frequency of the device.

### ●External dimensions (Unit : mm)



Transistors

●Electrical characteristics curves

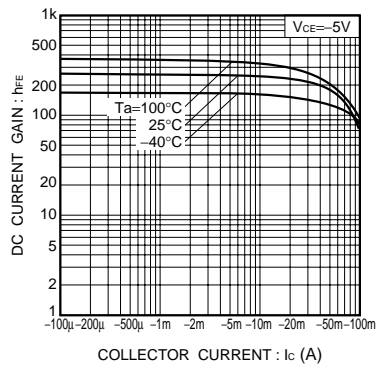


Fig.1 DC current gain vs.collector current

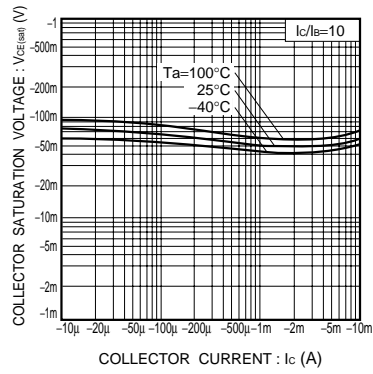


Fig.2 Collector-emitter saturation voltage vs.collector current

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