

Transistors

# Power management (dual digital transistors)

## IMD1A

●Features

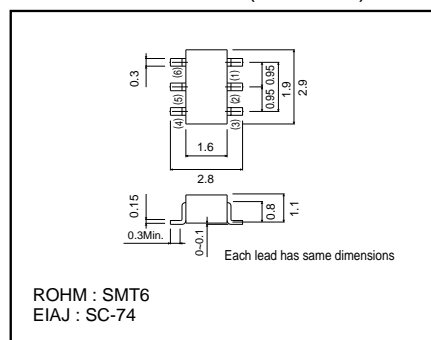
1) Both the DTA124T chip and DTC124T chip in a SMT package.

●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>	300(TOTAL)	mW *
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55~+150	°C

\* 200mW per element must not be exceeded. PNP type negative symbols have been omitted.

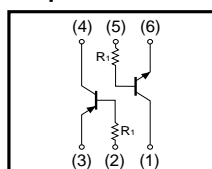
●External dimensions (Units : mm)



●Package, marking, and packaging specifications

Type	IMD1A
Package	SMT6
Marking	D1
Code	T108
Basic ordering unit (pieces)	3000

●Equivalent circuit



●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> =5V, I <sub>c</sub> =1mA
Transition frequency	f <sub>r</sub>	-	250	-	MHz	V <sub>CE</sub> =10V, I <sub>E</sub> =-5mA, f=100MHz *
Input resistance	R <sub>i</sub>	15.4	22	28.6	kΩ	-

\* Transition frequency of mounted transistor. PNP type negative symbols have been omitted.



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

[LittleDiode.com](http://LittleDiode.com)

Looking forward to providing you with the best possible service.