

IMD14 General purpose (dual digital transistors)

IMD14

●Features

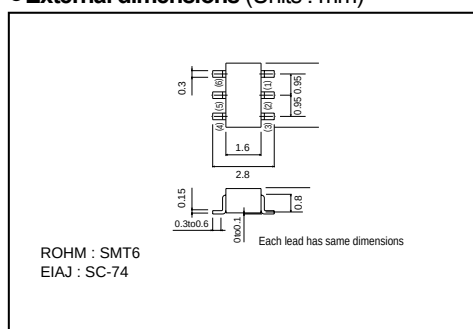
- 1) Two 500 mA digital transistor chips in a SMT package.
- 2) The drive transistors are independent, eliminating interference.

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	50	V
Input voltage	V _{IN}	5 -5	V
Output current	I _C	500	mA
Power dissipation	P _d	300 (TOTAL)	mW *
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55~+150	°C

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

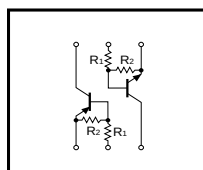
●External dimensions (Units : mm)



●Packaging specifications and hFE

Part No.	IMD14
Package	SMT6
Marking	D14
Code	T108
Basic ordering unit (pieces)	3000

●Circuit diagram



●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V _{I (off)}	—	—	0.3	V	V _{CC} =5V, I _O =100μA
	V _{I (on)}	1.1	—	—	V	V _O =0.3V, I _O =1mA
Output voltage	V _{O (on)}	—	—	0.3	V	I _O /I _I =100mA/5mA
Input current	I _I	—	—	17	mA	V _I =3V
Output current	I _{O (off)}	—	—	0.5	μA	V _{CC} =50V, V _I =0V
DC current gain	G _I *1	82	—	—	—	I _O =100mA, V _O =5V *1
Transition frequency	f _T *2	—	250	—	MHz	V _{CE} =10V, I _E =-50mA, f=100MHz *2
Input resistance	R _I	154	220	286	Ω	—
Resistance ratio	R ₂ /R ₁	36.3	45.5	54.6	—	—

*1 Measured using pulse current
PNP type negative symbols have been omitted.

*2 Transition frequency of the device