

IMD14 General purpose (dual digital transistors)

IMD14

●Features

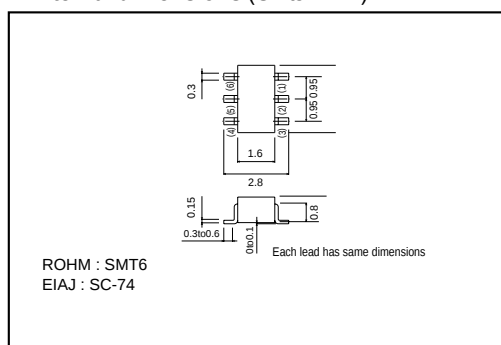
- 1) Two 500 mA digital transistor chips in a SMT package.
- 2) The drive transistors are independent, eliminating interference.

●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.

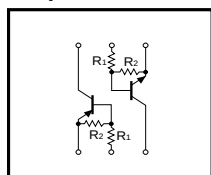
●External dimensions (Units : mm)



●Package, marking, and packaging specifications

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

●Equivalent circuit



●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V_i (off)	-	-	0.3	V	$V_{CC}=5V$, $I_o=100\mu A$
	V_i (on)	1.1	-	-		$V_o=0.3V$, $I_o=50mA$
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

*2 Transition frequency of the device

PNP type negative symbols have been omitted.