

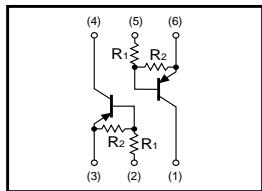
General purpose (dual digital transistors)

IMB16

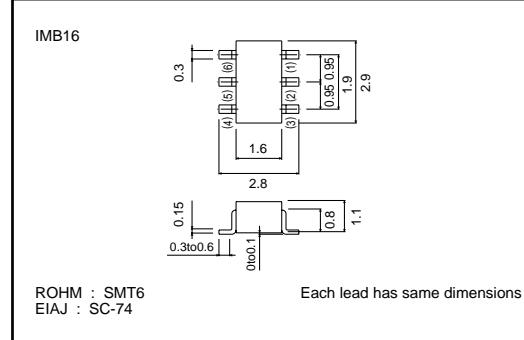
●Features

- 1) Two DTB143X chips in a SMT package.

●Equivalent circuit



●External dimensions (Units : mm)



●Package, marking, and packaging specifications

Type	IMB16
Package	SMT6
Marking	B16
Code	T110
Basic ordering unit (pieces)	3000

●Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	-50	V
Input voltage	V_{IN}	-30	V
		7	
Output current	I_O	-500	mA
Power dissipation	P_d	300(TOTAL)	mW *
Junction temperature	T_j	150	°C
Storage temperature	T_{STG}	-50~+150	°C

*200mW per element must not be exceeded.

●Electrical characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V_I (off)	—	—	-0.3	V	$V_{CC}=-5\text{V}$, $I_O=-100\mu\text{A}$
	V_I (on)	-2.5	—	—		$V_O=-0.3\text{V}$, $I_O=-20\text{mA}$
Output voltage	V_O (on)	—	—	-0.3	V	$I_O/I_L=50\text{mA}/-2.5\text{mA}$
Input current	I_I	—	—	-1.8	mA	$V_I=-5\text{V}$
Output current	I_O (off)	—	—	-0.5	μA	$V_{CC}=-50\text{V}$, $V_I=0\text{V}$
DC current gain	G_I	56	—	—	—	$I_O=-50\text{mA}$, $V_O=-5\text{V}$ *1
Transition frequency	f_T	—	200	—	MHz	$V_{CE}=-10\text{V}$, $I_O=50\text{mA}$, $f=100\text{MHz}$ *2
Input resistance	R_I	3.29	4.7	6.11	kΩ	—
Resistance ratio	R_2/R_1	1.7	2.1	2.6	—	—

*1 Measured using pulse current.

*2 Transition frequency of the device.