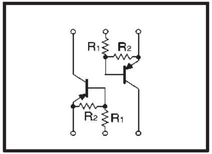
General purpose (dual digital transistors)
IMB16

●Features
1） Two DTB143X chips in a SMT package.

●Circuit diagram



●Absolute maximum ratings（Ta=25℃）

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	Pd	300（TOTAL）	mW *
Junction temperature	Tj	150	℃
Storage temperature	Tstg	−55〜+150	℃

* 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	IMB16
Package	SMT6
Marking	B16
Code	T110
Basic ordering unit (pieces)	3000

●Electrical characteristics（Ta=25℃）

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	—	—	−0.3	V	V_{CC}=−5V , I_O=−100 μA
	$V_{I(on)}$	−2.5	—	—		V_O=−0.3V , I_O=−20mA
Output voltage	$V_{O(on)}$	—	—	−0.3	V	I_O/I_I=−50mA/−2.5mA
Input current	I_I	—	—	−1.8	mA	V_I=−5V
Output current	$I_{O(off)}$	—	—	−0.5	μA	V_{CC}=−50V , V_I=0V
DC current gain	G_I	56	—	—	—	I_O=−50mA , V_O=−5V *1
Transition frequency	f_T	—	200	—	MHz	V_{CE}=−10V , I_E=50mA , f=100MHz *2
Input resistance	R_1	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.