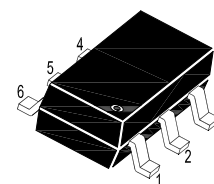
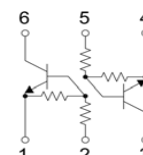


Dual Digital Transistors (NPN+NPN)



■ Simplified outline(SOT-363)



■ FEATURES

- Two DTC123J chips in a package
- Mounting possible with SOT-363 automatic mounting machines
- Transistor elements are independent, eliminating interference
- Mounting cost and area be cut in half

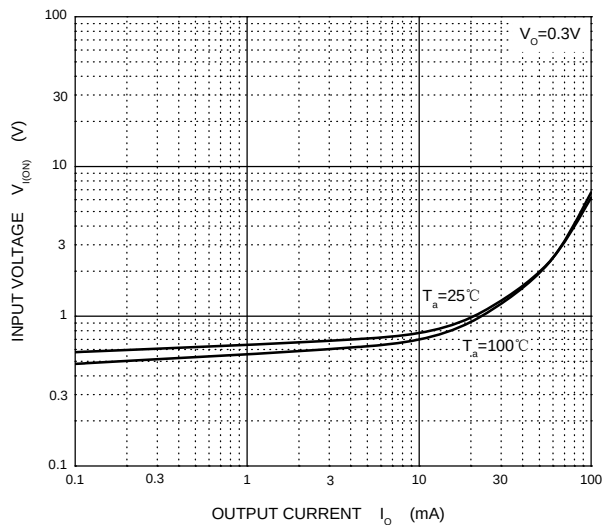
■ Absolute maximum ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Supply voltage	V_{CC}	50	V
Input voltage	V_{IN}	-5~12	V
Output current	I_O	100	mA
	$I_{C(MAX)}$	100	
Power dissipation	P_d	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55~150	°C

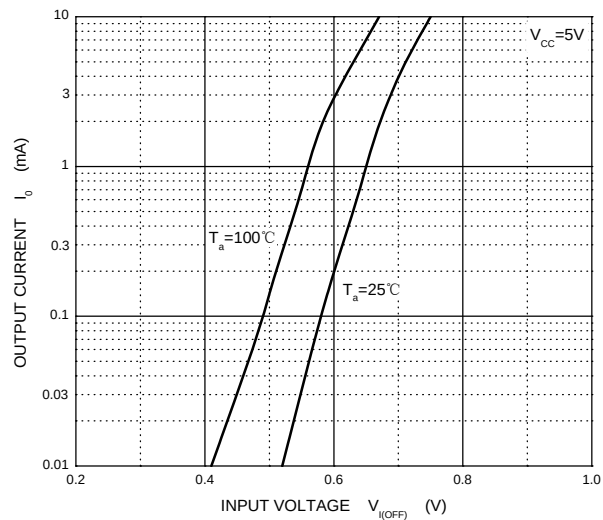
■ Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	0.5			V	$V_{CC}=5V, I_O=100\mu A$
	$V_{I(on)}$			1.1		$V_O=0.3V, I_O=5mA$
Output voltage	$V_{O(on)}$		0.1	0.3	V	$I_O/I_I=5mA/0.25mA$
Input current	I_I			3.6	mA	$V_I=5V$
Output current	$I_{O(off)}$			0.5	μA	$V_{CC}=50V, V_I=0$
DC current gain	G_I	80				$V_O=5V, I_O=10mA$
Input resistance	R_1	1.54	2.2	2.86	K Ω	-
Resistance ratio	R_2/R_1	17	21	26		-
Transition frequency	f_T		250		MHz	$V_{CE}=10V, I_E=5mA, f=100MHz$

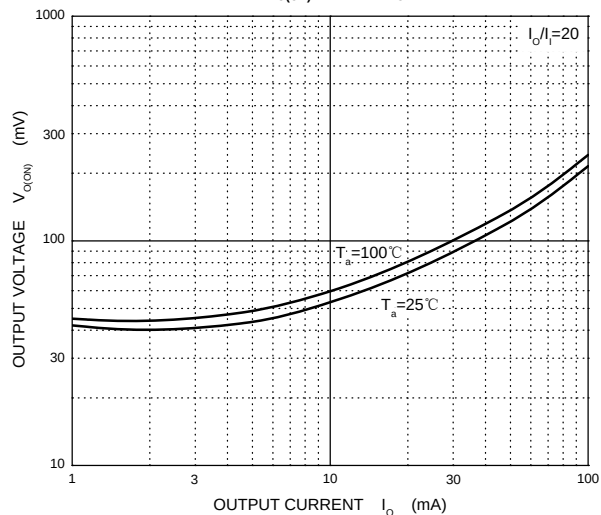
ON Characteristics



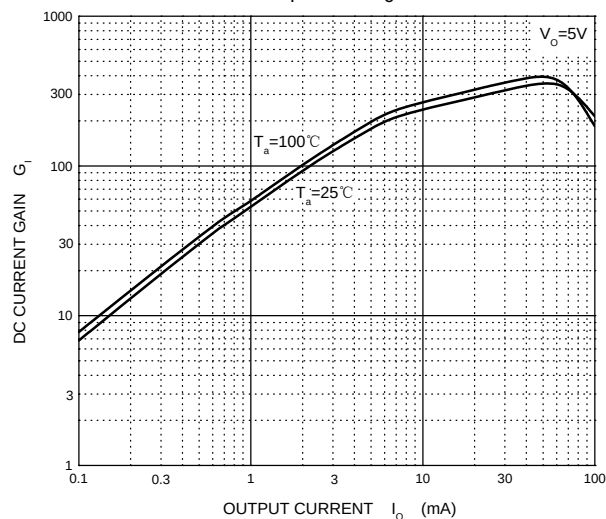
OFF Characteristics



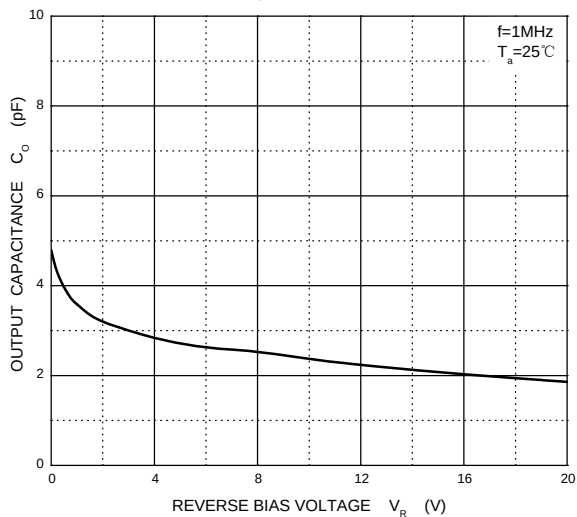
$V_{O(ON)}$ — I_O



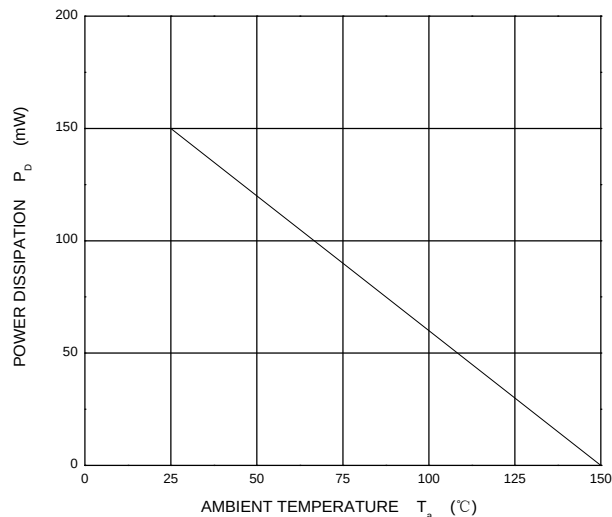
G_I — I_O



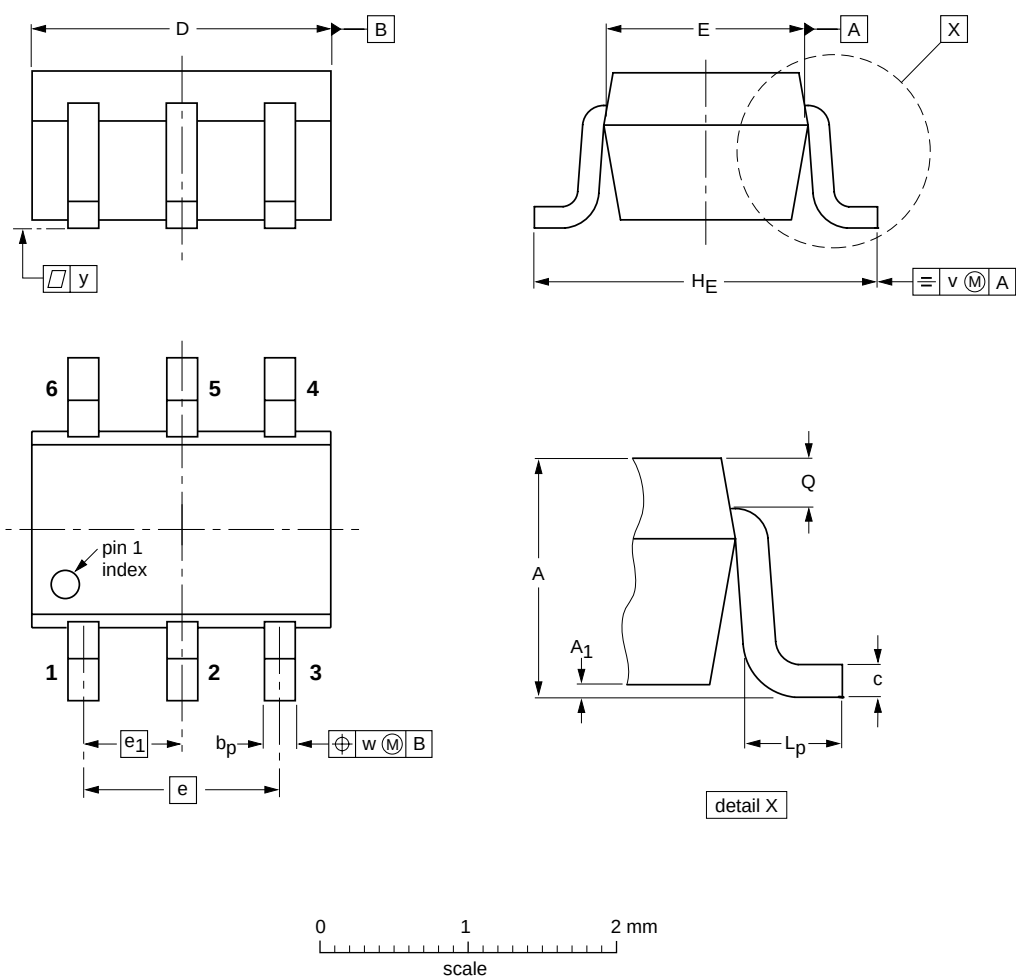
C_O — V_R



P_D — T_a



■ SOT-363



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1