

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

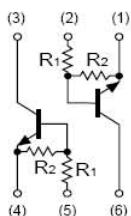
FEATURES

- Two DTC124E chip in a package.
- Transistor elements are independent, eliminating interference.
- Mounting cost and area be cut in half.
- Mounting possible with SOT-363 automatic mounting machines.

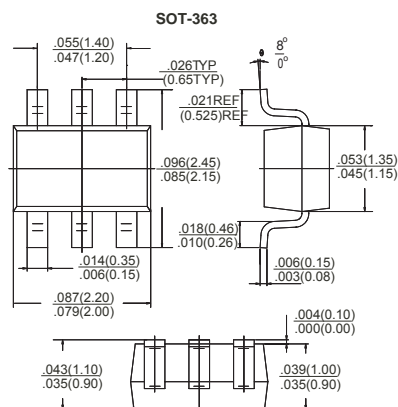
MARKING

H1

EQUIVALENT CIRCUIT



$$R_1=R_2=22K\Omega$$



Dimensions in inches and (millimeters)



ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Supply voltage	V_{CC}	50	V
Input voltage	V_{IN}	-10~40	V
Output current	I_O	30	mA
	$I_{C(MAX)}$	100	
Power dissipation	P_D	150	mW
Junction & Storage temperature	T_J, T_{STG}	150, -55~150	°C

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS at Ta = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Input voltage	$V_{I(OFF)}$	-	-	0.5	V	$V_{CC}=5V, I_O=100\mu A$
	$V_{I(ON)}$	3	-	-		$V_O=0.2V, I_O=5mA$
Output voltage	$V_{O(ON)}$	-	0.1	0.3	V	$I_O/I_I=10mA/0.5mA$
Input current	I_I	-	-	0.36	mA	$V_I=5V$
Output current	$I_{O(OFF)}$	-	-	0.5	μA	$V_{CC}=50V, V_I=0$
DC current gain	G_1	56	-	-		$V_O=5V, I_O=5mA$
Input resistance	R_1	15.4	22	28.6	K Ω	-
Resistance ratio	R_2 / R_1	0.8	1	1.2		-
Transition frequency	f_T	-	250	-	MHz	$V_{CE}=10V, I_E=5mA, f=100MHz$

CHARACTERISTIC CURVES

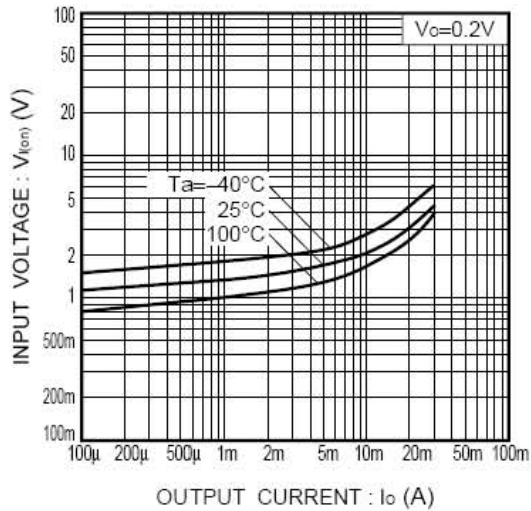


Fig.1 Input voltage vs. output current (ON characteristics)

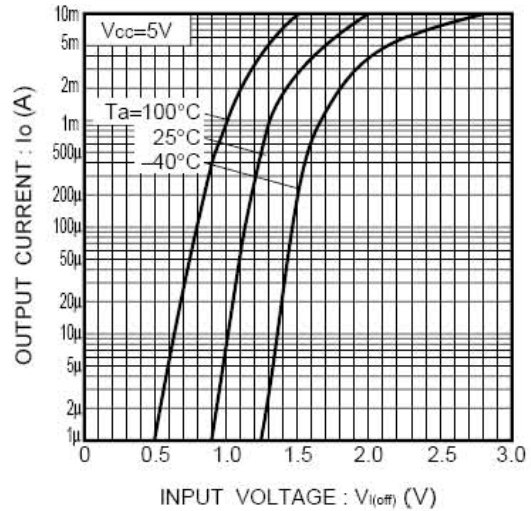


Fig.2 Output current vs. input voltage (OFF characteristics)

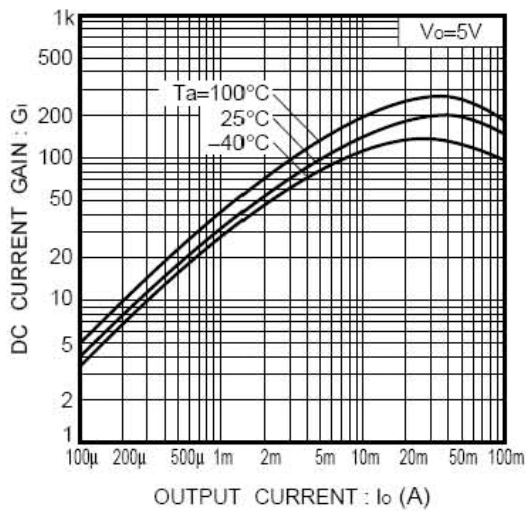


Fig.3 DC current gain vs. output

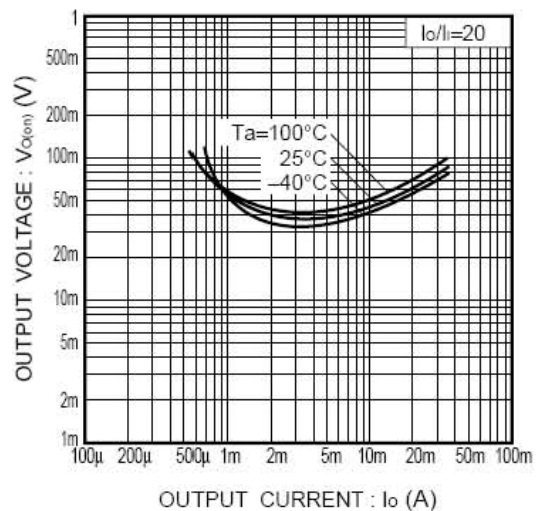


Fig.4 Output voltage vs. output current