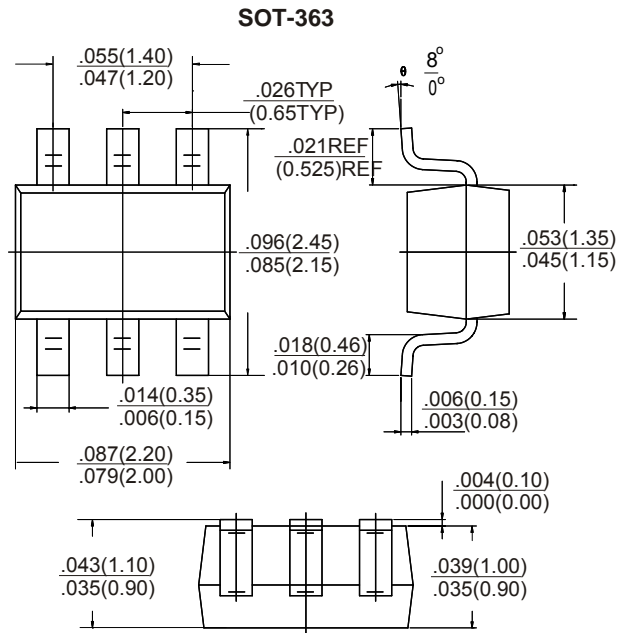
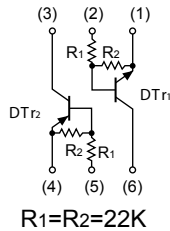


Features

- * DTA124E and DTC124E transistors are built-in a SOT-363 package.
- * Transistor elements are independent, eliminating interference.
- * Mounting cost and area can be cut in half.



Dimensions in inches and (millimeters)

MARKING:D2

Electrical Characteristics($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Limits	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(TOTAL)	mW
Junction temperature	T_j	150	$^{\circ}C$
Storage temperature	T_{stg}	-55~150	$^{\circ}C$

Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$			0.5	V	$V_{CC}=5V, I_O=100 \mu A$
	$V_{I(on)}$	3				$V_O=0.2V, I_O=10mA$
Output voltage	$V_{O(on)}$			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_I	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	$V_{CE}=10V, I_E=-5mA, f=100MHz$

DTr1 (NPN)

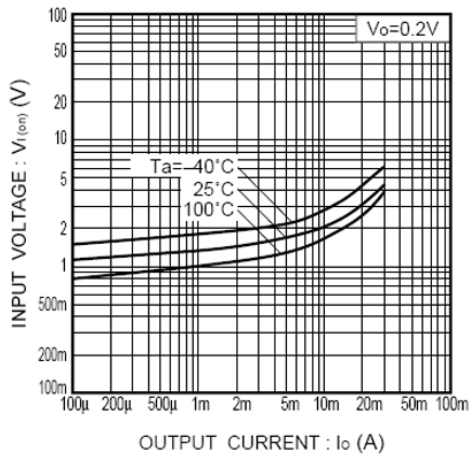


Fig.1 Input voltage vs. output current (ON characteristics)

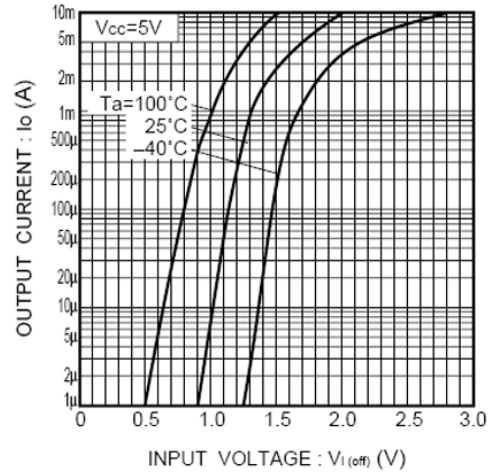


Fig.2 Output current vs. input voltage (OFF characteristics)

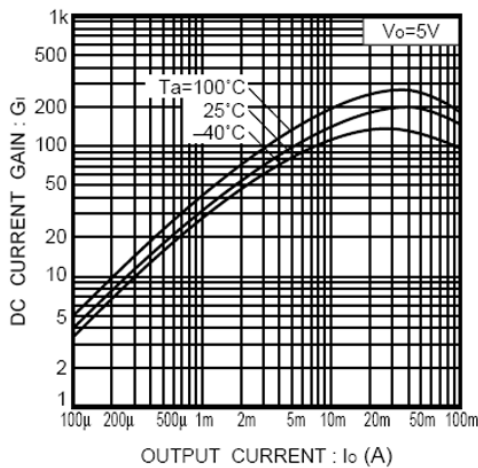


Fig.3 DC current gain vs. output current

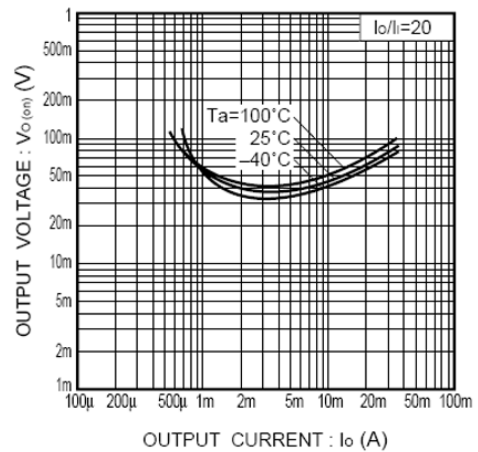


Fig.4 Output voltage vs. output current

DTr2 (PNP)

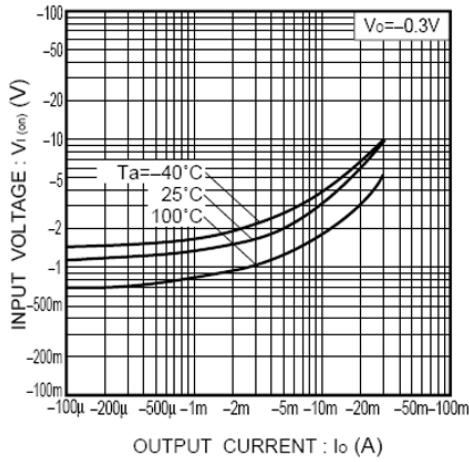


Fig.5 Input voltage vs. output current (ON characteristics)

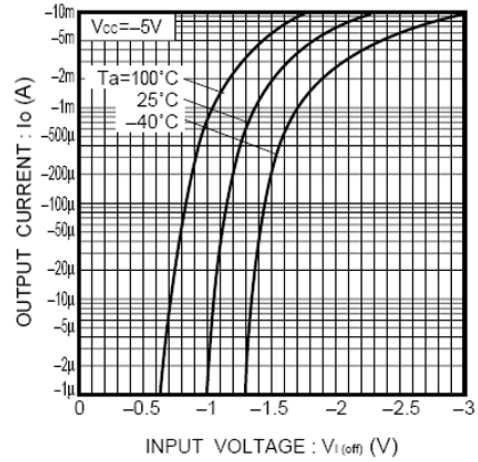


Fig.6 Output current vs. input voltage (OFF characteristics)

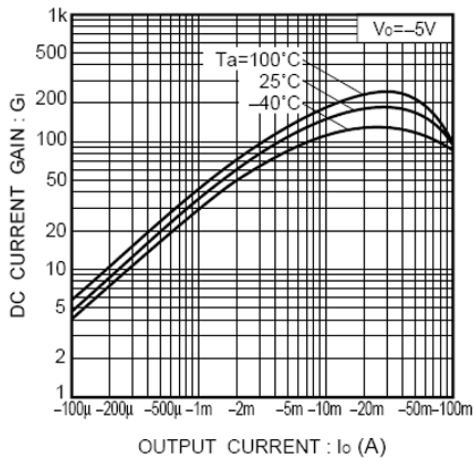


Fig.7 DC current gain vs. output current

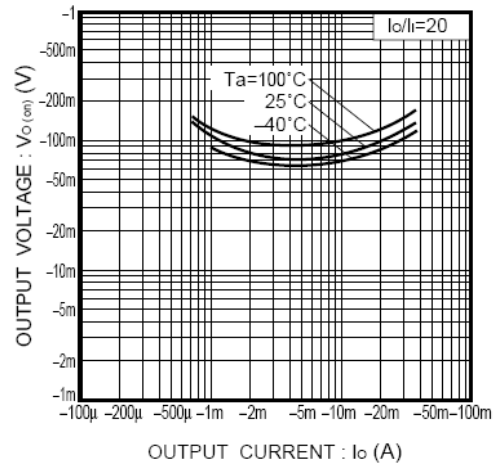


Fig.8 Output voltage vs. output current