Elektronische Bauelemente

UMH1N

0.15 W, 30 mA, 50 V

General purpose transistors (dual transistors)

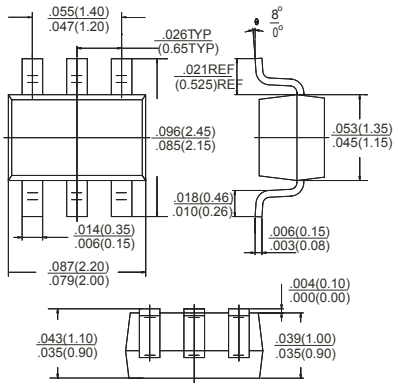
RoHS Compliant Product

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.

SOT-363

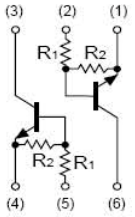


Dimensions in inches and (millimeters)

MARKING

H1

EQUIVALENT CIRCUIT



R_1=R_2=22KΩ

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	℃

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=100μA
	$V_{I(ON)}$	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_I	56	-	-		V_O=5V, I_O=5mA
Input resistance	R_1	15.4	22	28.6	KΩ	-
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

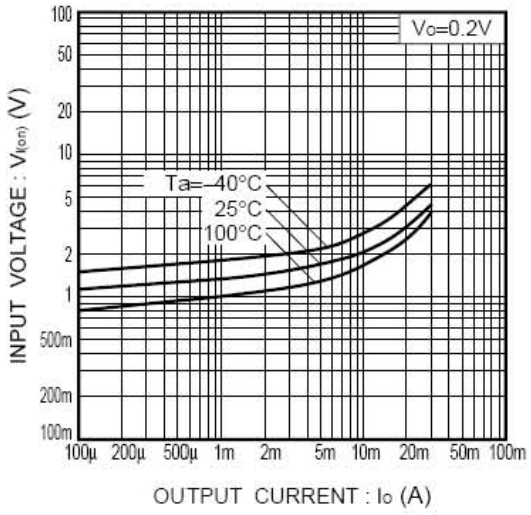


Fig.1 Input voltage vs. output current (ON characteristics)

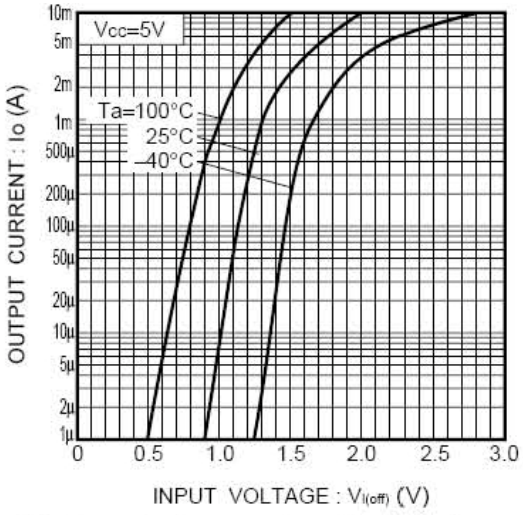


Fig.2 Output current vs. input voltage (OFF characteristics)

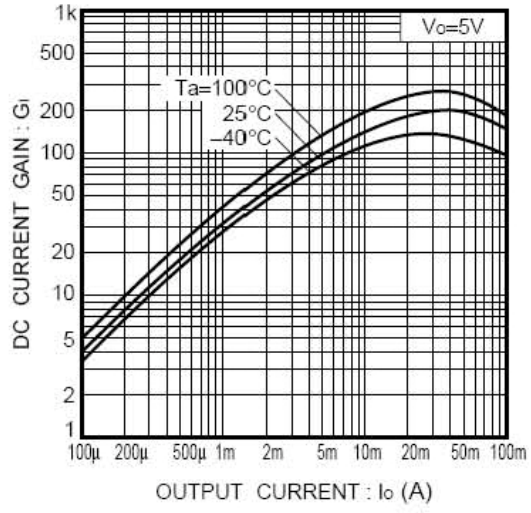


Fig.3 DC current gain vs. output

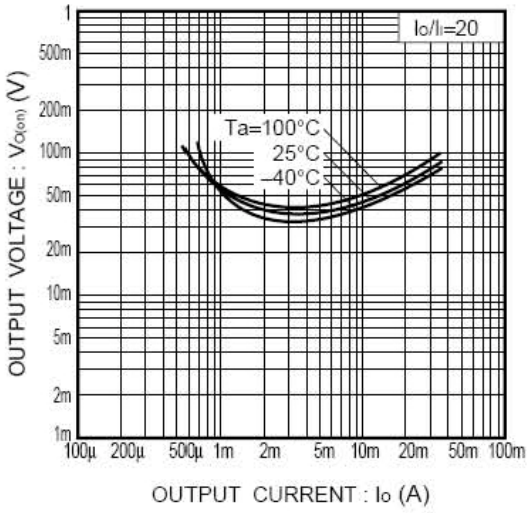


Fig.4 Output voltage vs. output current