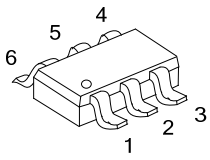
UH10K

NPN SILICON TRANSISTOR

GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)

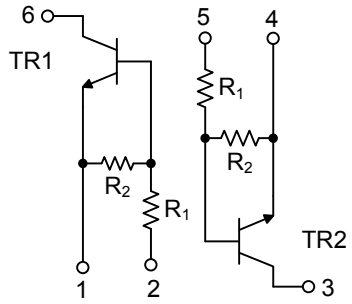


SOT-363

■ FEATURES

* Two UTC **DTC123J** chips in a SOT-363 package.
* Halogen Free

■ EQUIVALENT CIRCUIT (R_1=2KΩ, R_2=47KΩ)

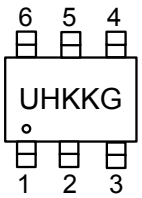


■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment						Packing
		1	2	3	4	5	6	
UH10KG-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel

UH10KG-AL6-R (1)Packing Type (2)Package Type (3)Halogen Free	(1) R: Tape Reel (2) AL6: SOT-363 (3) G: Halogen Free

■ MARKING



Copyright © 2009 Unisonic Technologies Co., Ltd

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V_{CC}	50	V
Input Voltage	V_{IN}	-5 ~ +12	V
Output Current	I_{OUT}	100	mA
	$I_{C(MAX.)}$	100	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

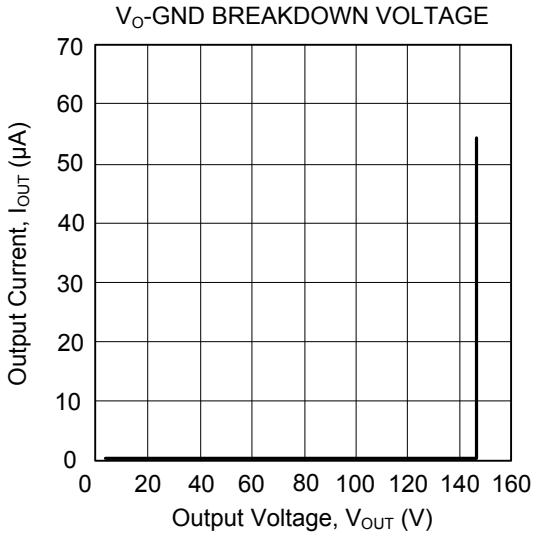
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

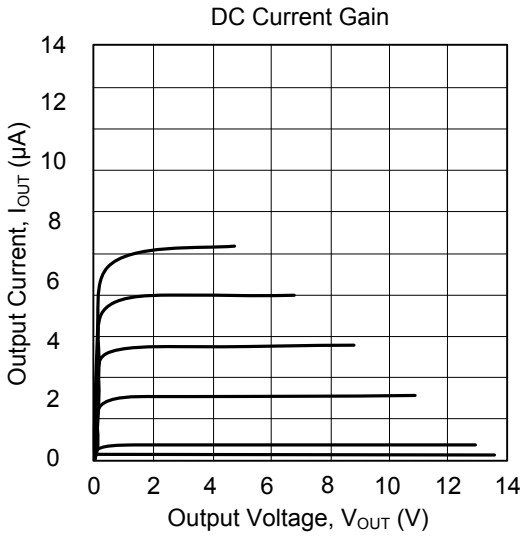
■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	$V_{I(OFF)}$	V_{CC}=5V, I_{OUT}=100μA			0.5	V
	$V_{I(ON)}$	V_{OUT}=0.3V, I_{OUT}=5mA	1.1			V
Output Voltage	$V_{O(ON)}$	I_{OUT}/I_{IN}=5mA/0.25mA		0.1	0.3	V
Input Current	I_{IN}	V_{IN}=5V			3.6	mA
Output Current	$I_{O(OFF)}$	V_{CC}=50V, V_{IN}=0V			0.5	μA
DC Current Gain	h_{FE}	V_{OUT}=5V, I_{OUT}=10mA	80			
Transition Frequency	f_T	V_{CE}=10V, I_E=-5mA, f=100MHz (Note)		250		MHz
Input Resistance	R_1		1.4	2	2.6	kΩ
Resistance Ratio	R_2/R_1		18	23	28	

Note: Transition frequency of the device

■ TYPICAL CHARACTERISTICS





UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.