



# UH10K

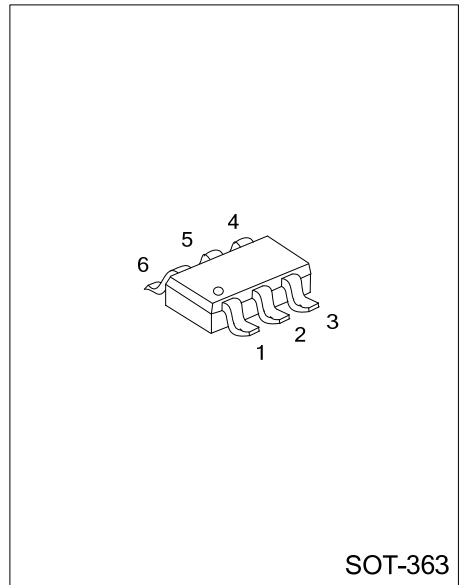
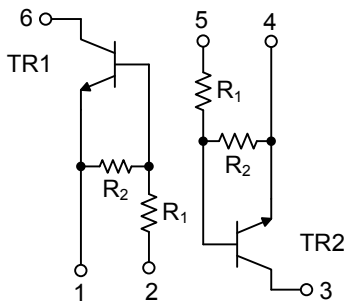
## NPN SILICON TRANSISTOR

### GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)

■ FEATURES

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

■ EQUIVALENT CIRCUIT ( $R_1=2K\Omega$ ,  $R_2=47K\Omega$ )

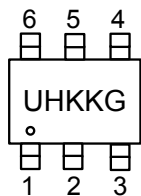


■ ORDERING INFORMATION

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

<p>UH10KG-AL6-R</p> <p>(1)Packing Type (2)Package Type (3)Halogen Free</p>	<p>(1) R: Tape Reel (2) AL6: SOT-363 (3) G: Halogen Free</p>
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■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V <sub>CC</sub>	50	V
Input Voltage	V <sub>IN</sub>	-5 ~ +12	V
Output Current	I <sub>OUT</sub>	100	mA
	I <sub>C(MAX.)</sub>	100	mA
Power Dissipation	P <sub>D</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C

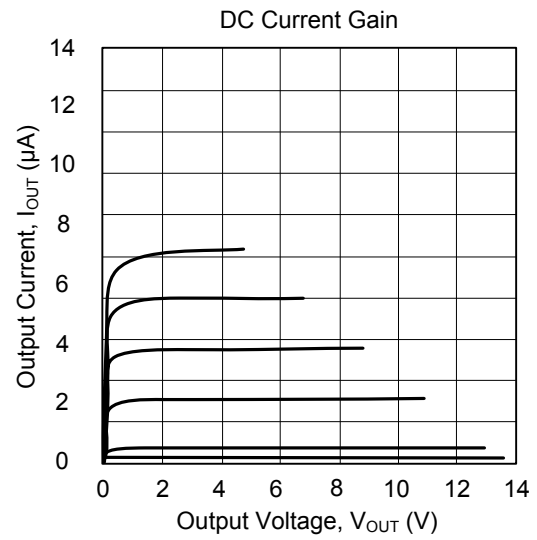
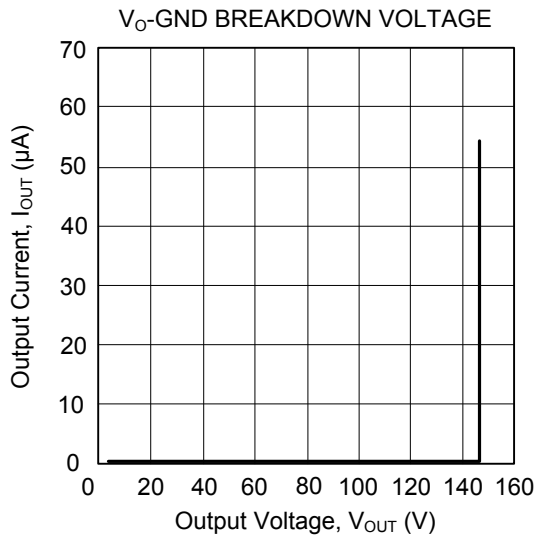
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.  
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	V <sub>I(OFF)</sub>	V <sub>CC</sub> = 5V, I <sub>OUT</sub> = 100μA			0.5	V
	V <sub>I(ON)</sub>	V <sub>OUT</sub> = 0.3V, I <sub>OUT</sub> = 5mA	1.1			V
Output Voltage	V <sub>O(ON)</sub>	I <sub>OUT</sub> /I <sub>IN</sub> = 5mA/0.25mA		0.1	0.3	V
Input Current	I <sub>IN</sub>	V <sub>IN</sub> = 5V			3.6	mA
Output Current	I <sub>O(OFF)</sub>	V <sub>CC</sub> = 50V, V <sub>IN</sub> = 0V			0.5	μA
DC Current Gain	h <sub>FE</sub>	V <sub>OUT</sub> = 5V, I <sub>OUT</sub> = 10mA	80			
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>E</sub> = -5mA, f = 100MHz (Note)		250		MHz
Input Resistance	R <sub>1</sub>		1.4	2	2.6	kΩ
Resistance Ratio	R <sub>2</sub> /R <sub>1</sub>		18	23	28	

Note: Transition frequency of the device

### ■ TYPICAL CHARACTERISTICS



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