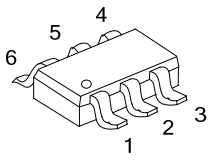
UH10K

NPN SILICON TRANSISTOR

GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)

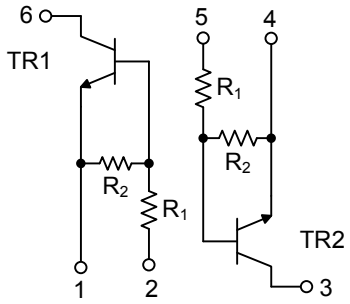


SOT-363

■ FEATURES

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

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

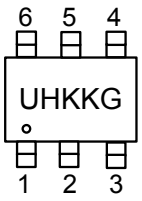


■ ORDERING INFORMATION

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



■ 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