



## UB2K

## DUAL TRANSISTOR

### GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)

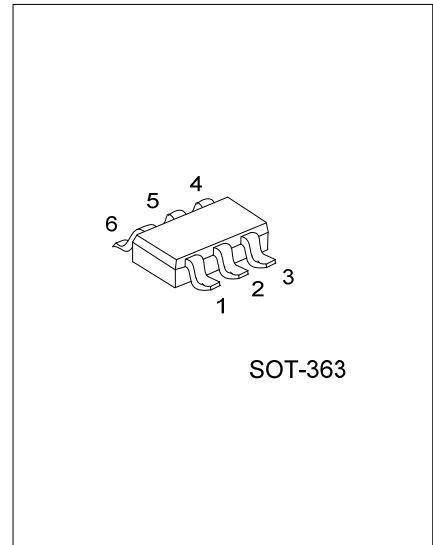
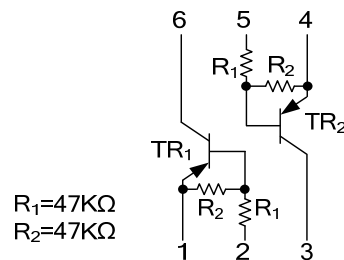
#### DESCRIPTION

As a dual digital transistor the UTC **UB2K** is epitaxial planar type PNP silicon transistor (built in resistor type).

#### FEATURES

- \* Two DTA144E chips in a SOT-363 package.
- \* Transistor elements are independent, eliminating interference.

#### SYMBOL



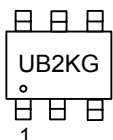
#### ORDERING INFORMATION

Ordering Number	Package	Pin Assignment						Packing
		1	2	3	4	5	6	
UB2KG-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>           UB2KG-AL6-R            (1)Packing Type            (2)Package Type            (3)Green Package         </p>	<p>           (1) R: Tape Reel            (2) AL6: SOT-363            (3) G: Halogen Free and Lead Free         </p>
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#### MARKING



■ ABSOLUTE MAXIMUM RATING ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	$V_{CC}$	-50	V
Input Voltage	$V_{IN}$	-40	V
		+10	
Output Current	$I_{OUT}$	-30	mA
	$I_C$	-100	
Power Dissipation	$P_D$	+150	mW
Junction Temperature	$T_J$	+150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150	$^{\circ}\text{C}$

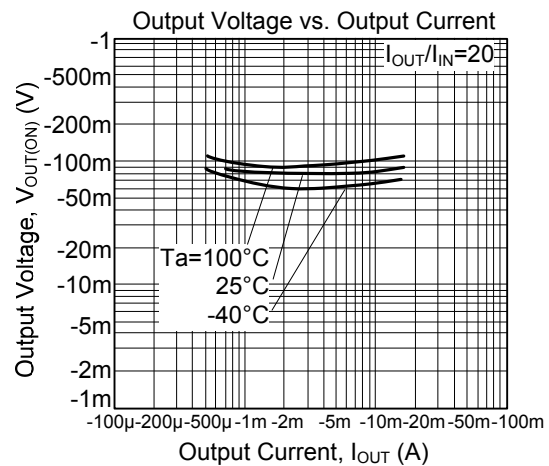
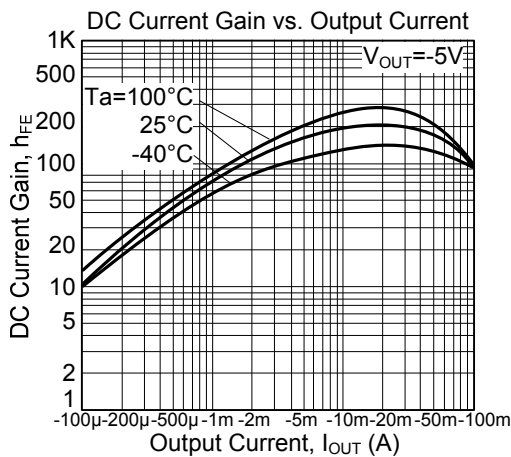
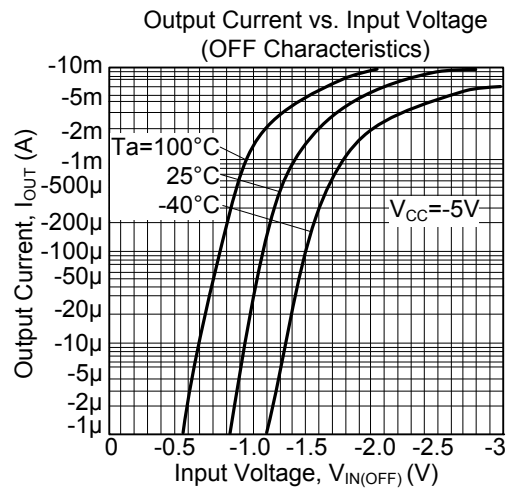
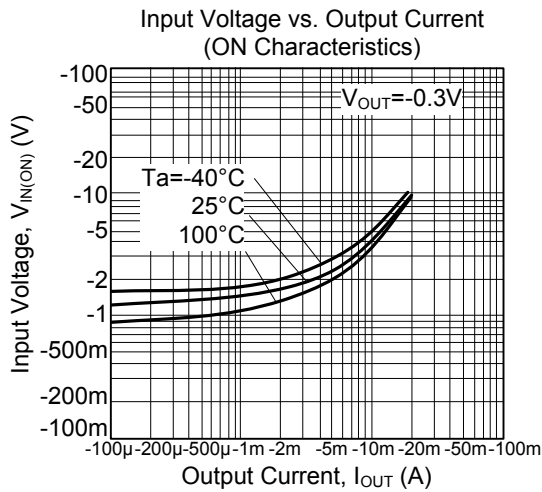
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	$V_{I(OFF)}$	$V_{CC}=-5\text{V}, I_{OUT}=-100\mu\text{A}$			-0.5	V
	$V_{I(ON)}$	$V_{OUT}=-0.3\text{V}, I_{OUT}=-2\text{mA}$	-3			
Output Voltage	$V_{O(ON)}$	$I_O/I_I=-10\text{mA}/-0.5\text{mA}$		-0.1	-0.3	V
Input Current	$I_{IN}$	$V_{IN}=-5\text{V}$			-0.18	mA
Output Current	$I_{O(OFF)}$	$V_{CC}=-50\text{V}, V_{IN}=0\text{V}$			-0.5	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{OUT}=-5\text{V}, I_{OUT}=-5\text{mA}$	68			
Transition Frequency	$f_T$	$V_{CE}=-10\text{V}, I_E=5\text{mA}, f=100\text{MHZ}$ (Note)		250		MHz
Input Resistance	$R_1$		32.9	47	61.1	k $\Omega$
Resistance Ratio	$R_2/R_1$		0.8	1	1.2	

Note: Transition frequency of the device

## ■ TYPICAL CHARACTERISTICS



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