



# UB2K

## DUAL TRANSISTOR

### GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)

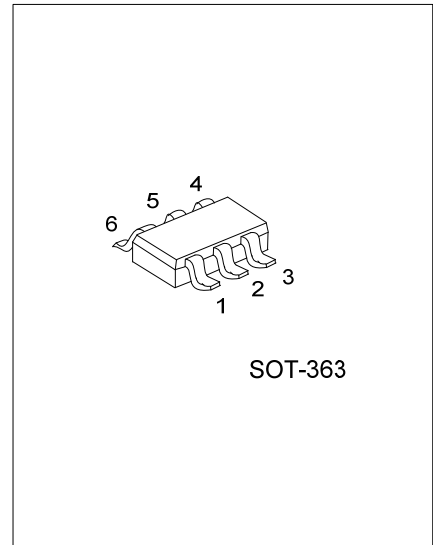
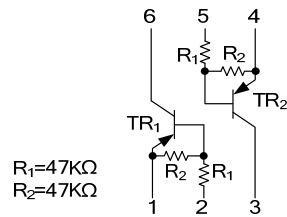
■ DESCRIPTION

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



SOT-363

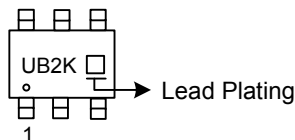
\*Pb-free plating product number: UB2KL

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Normal	Lead Free Plating		1	2	3	4	5	6	
UB2K-AL6-R	UB2KL-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel

<p>UB2KL-AL6-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Lead Plating</li> </ul>	<ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) AL6: SOT-363</li> <li>(3) L: Lead Free Plating, Blank: Pb/Sn</li> </ul>
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■ MARKING



■ ABSOLUTE MAXIMUM RATING (Ta=25°C)

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	°C
Storage Temperature	$T_{STG}$	-55 ~ +150	°C

Note: Absolute maximum ratings are the values beyond which the device will be damaged permanently.

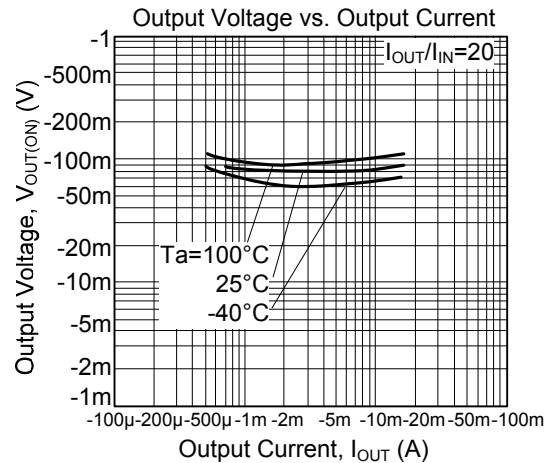
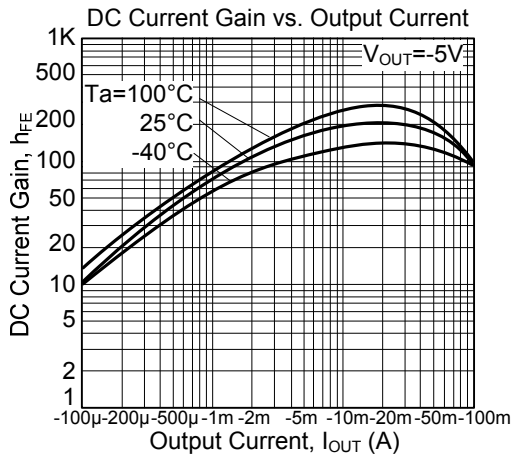
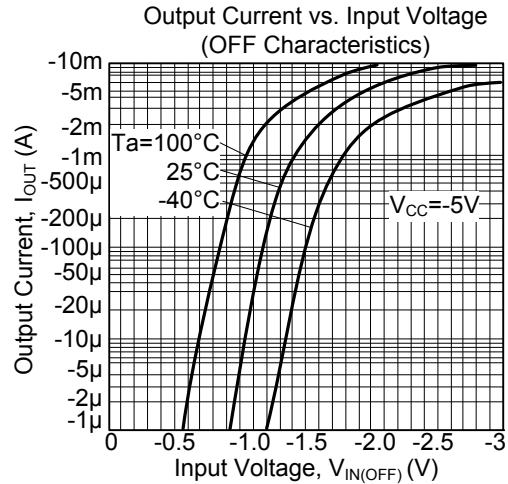
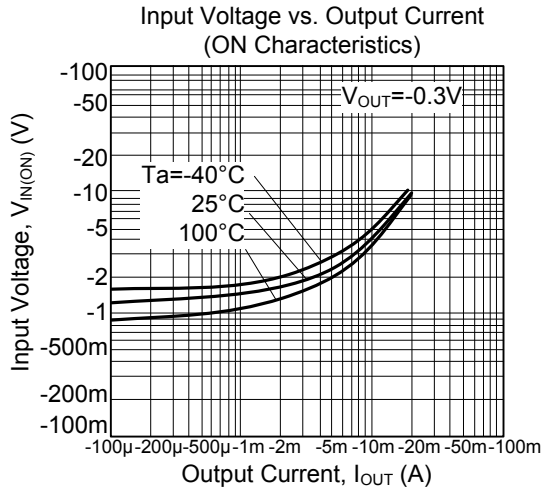
Absolute maximum ratings are only stress ratings and it is not implied for functional device operation.

■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	$V_{I(OFF)}$	$V_{CC}=-5V, I_{OUT}=-100\mu A$			-0.5	V
	$V_{I(ON)}$	$V_{OUT}=-0.3V, I_{OUT}=-2mA$	-3			
Output Voltage	$V_{O(ON)}$	$I_O/I_I=-10mA/-0.5mA$		-0.1	-0.3	V
Input Current	$I_{IN}$	$V_{IN}=-5V$			-0.18	mA
Output Current	$I_{O(OFF)}$	$V_{CC}=-50V, V_{IN}=0V$			-0.5	$\mu A$
DC Current Gain	$h_{FE}$	$V_{OUT}=-5V, I_{OUT}=-5mA$	68			
Transition Frequency	$f_T$	$V_{CE}=-10V, I_E=5mA, f=100MHZ$ (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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