



UB2K

DUAL TRANSISTOR

GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)

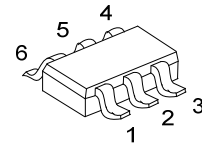
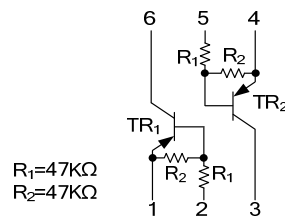
DESCRIPTION

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

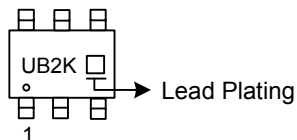
*Pb-free plating product number: UB2KL

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

UB2KL-AL6-R (1) Packing Type (2) Package Type (3) Lead Plating	(1) R: Tape Reel (2) AL6: SOT-363 (3) L: Lead Free Plating, Blank: Pb/Sn
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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.

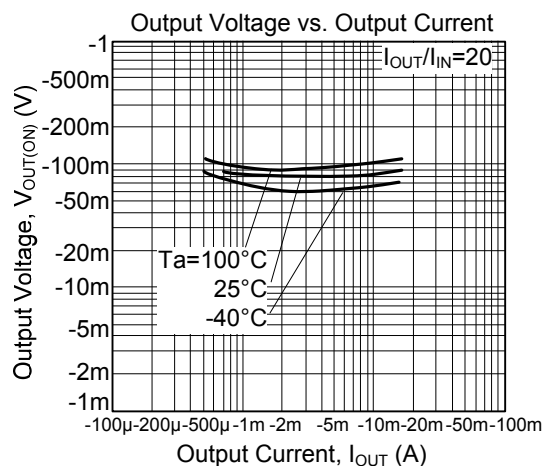
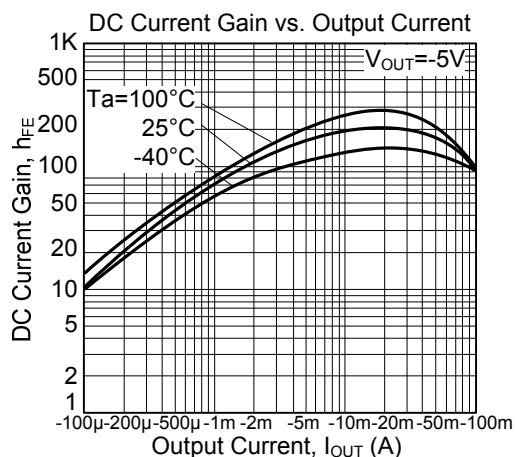
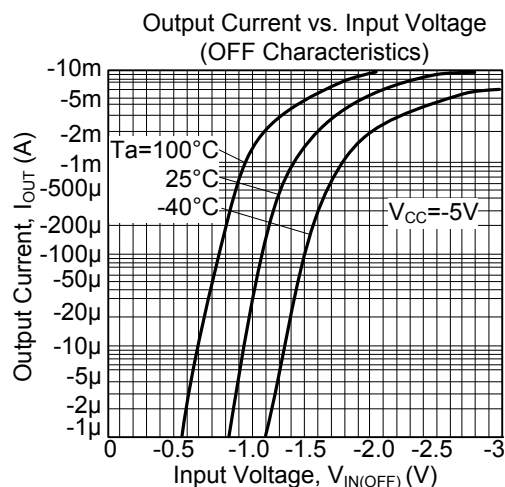
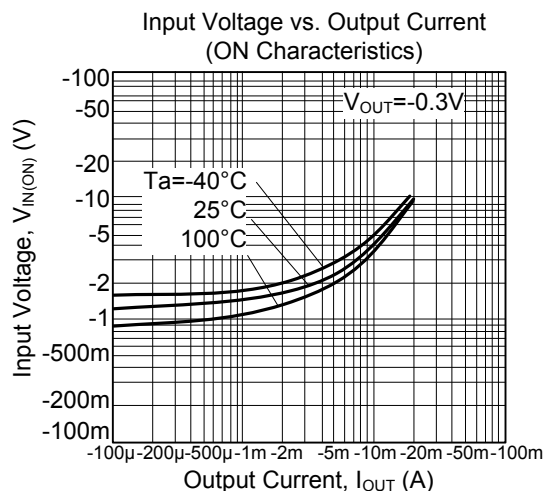
Absolute maximum ratings are only stress ratings and it is not implied for functional device operation.

■ 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	μA
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 Ω
Resistance Ratio	R_2/R_1		0.8	1	1.2	

Note: Transition frequency of the device

■ TYPICAL CHARACTERISTICS



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