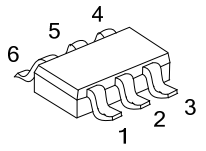
UB9K

DUAL TRANSISTOR

GENERAL PURPOSE
(DUAL DIGITAL RANSISTORS)

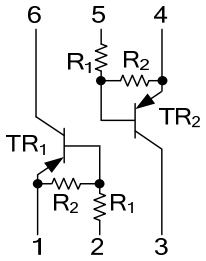


SOT-363

■ FEATURES

* Two DTA114Y chips in a SOT-363 package.

■ EQUIVALENT CIRCUIT



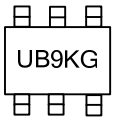
■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment						Packing
		1	2	3	4	5	6	
UB9KG-AL6-R	SOT-363	G1	I1	O2	G2	I2	O1	Tape Reel

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

UB9KG-AL6-R (1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) AL6: SOT-363 (3) G: Halogen Free and Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-40 ~ +6	V
Output Current	I_{OUT}	-70	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.

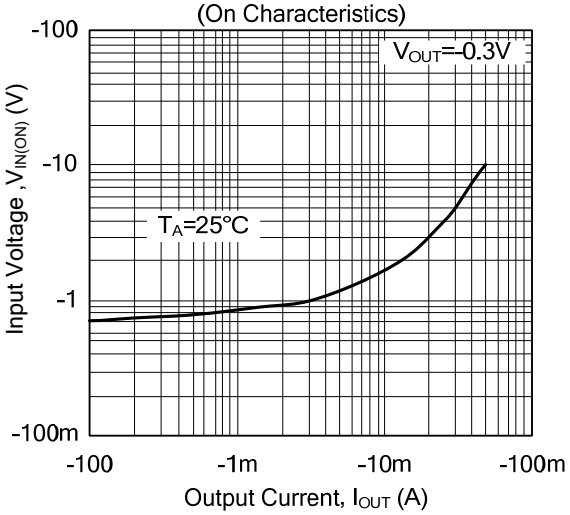
■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	$V_{IN(OFF)}$	V_{CC}=-5V, I_{OUT}=-100μA			-0.3	V
	$V_{IN(ON)}$	V_{OUT}=-0.3V, I_{OUT}=-1mA	-1.4			V
Output Voltage	$V_{OUT\ (ON)}$	I_{OUT}/I_{IN}=-5mA/-0.25mA		-0.1	-0.3	V
Input Current	I_{IN}	V_{IN}=-5V			-0.88	mA
Output Current	$I_{OUT(OFF)}$	V_{CC}=-50V, V_{IN}=0V			-0.5	μA
DC Current Gain	h_{FE}	V_{OUT}=-5V, I_{OUT}=-5mA	68			
Input Resistance	R_1		7	10	13	KΩ
Resistance Ratio	R_2/R_1		3.7	4.7	5.7	
Transition Frequency	f_T	V_{CE}=-10V, I_E=5mA, f=100MHz(Note)		250		MHz

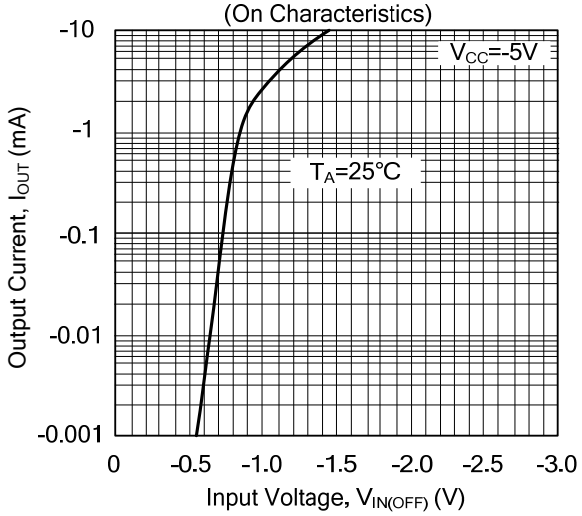
Note: Transition frequency of the device.

■ TYPICAL CHARACTERISTICS

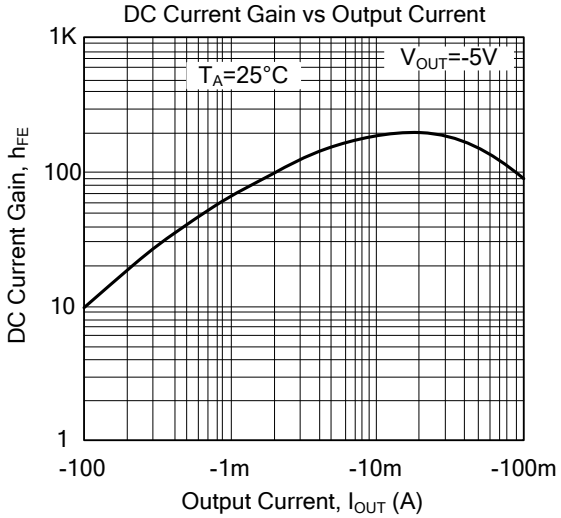
Input Voltage vs Output Current
(On Characteristics)



Output Current vs Input Voltage
(On Characteristics)



DC Current Gain vs Output Current



Output Voltage vs Output Current