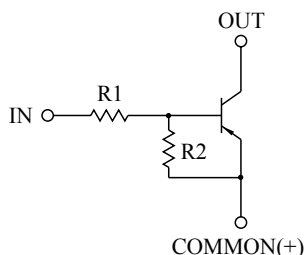


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

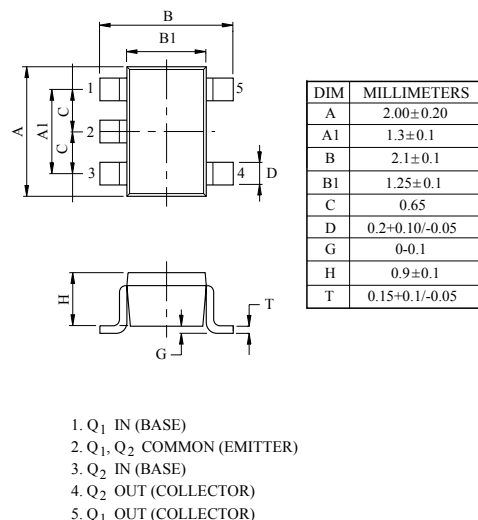
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

### EQUIVALENT CIRCUIT



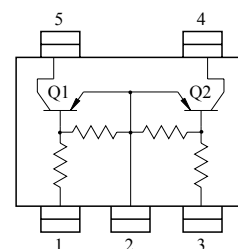
### BIAS RESISTOR VALUES

TYPE NO.	R1(k $\Omega$ )	R2(k $\Omega$ )
KRA551U	4.7	4.7
KRA552U	10	10
KRA553U	22	22
KRA554U	47	47
KRA555U	2.2	47
KRA556U	4.7	47



USV

### EQUIVALENT CIRCUIT (TOP VIEW)



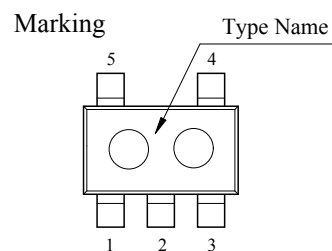
### MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA551U ~ 556U	V <sub>O</sub>	-50	V
Input Voltage	KRA551U	V <sub>I</sub>	-20, 10	V
	KRA552U		-30, 10	
	KRA553U		-40, 10	
	KRA554U		-40, 10	
	KRA555U		-12, 5	
	KRA556U		-20, 5	
Output Current	KRA551U ~ 556U	I <sub>O</sub>	-100	mA
Power Dissipation		P <sub>D</sub> *	200	mW
Junction Temperature		T <sub>j</sub>	150	℃
Storage Temperature Range		T <sub>stg</sub>	-55 ~ 150	℃

\* Total Rating.

### MARK SPEC

TYPE	KRA551U	KRA552U	KRA553U	KRA554U	KRA555U	KRA556U
MARK	PA	PB	PC	PD	PE	PF



# KRA551U~KRA556U

## ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRA551U ~ 556U	$I_{O(OFF)}$	$V_O = -50V, V_I = 0$	-	-	-500	nA
DC Current Gain	KRA551U	$G_I$	$V_O = -5V, I_O = -10mA$	30	55	-	
	KRA552U			50	80	-	
	KRA553U			70	120	-	
	KRA554U			80	200	-	
	KRA555U			80	200	-	
	KRA556U			80	200	-	
Output Voltage	KRA551U ~ 556U	$V_{O(ON)}$	$I_O = -10mA, I_I = -0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	KRA551U	$V_{I(ON)}$	$V_O = -0.2V, I_O = -5mA$	-	-1.5	-2.0	V
	KRA552U			-	-1.8	-2.4	
	KRA553U			-	-2.1	-3.0	
	KRA554U			-	-2.8	-5.0	
	KRA555U			-	-0.8	-1.1	
	KRA556U			-	-0.9	-1.3	
Input Voltage (OFF)	KRA551U ~ 554U	$V_{I(OFF)}$	$V_O = -5V, I_O = -0.1mA$	-1.0	-1.2	-	V
	KRA555U ~ 556U			-0.5	-0.65	-	
Transition Frequency	KRA551U ~ 556U	$f_T^*$	$V_O = -10V, I_O = -5mA$	-	200	-	MHz
Input Current	KRA551U	$I_I$	$V_I = -5V$	-	-	-1.8	mA
	KRA552U			-	-	-0.88	
	KRA553U			-	-	-0.36	
	KRA554U			-	-	-0.18	
	KRA555U			-	-	-3.6	
	KRA556U			-	-	-1.8	

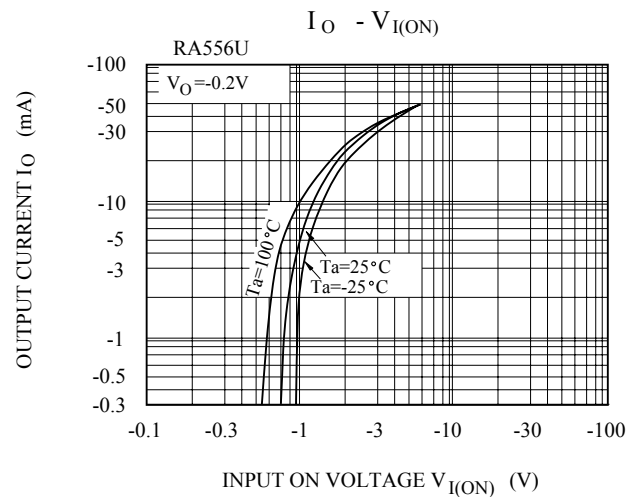
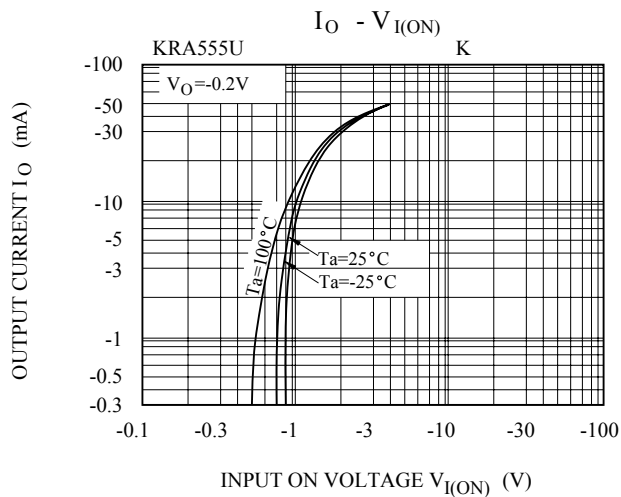
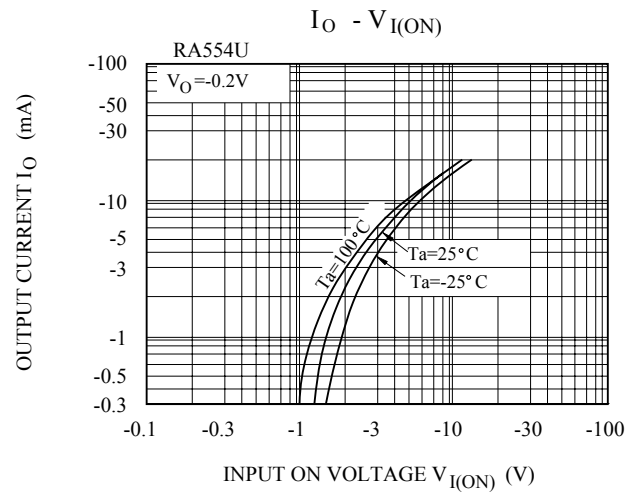
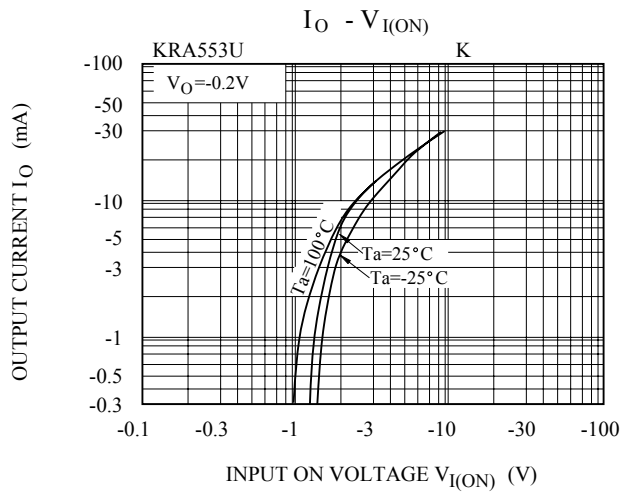
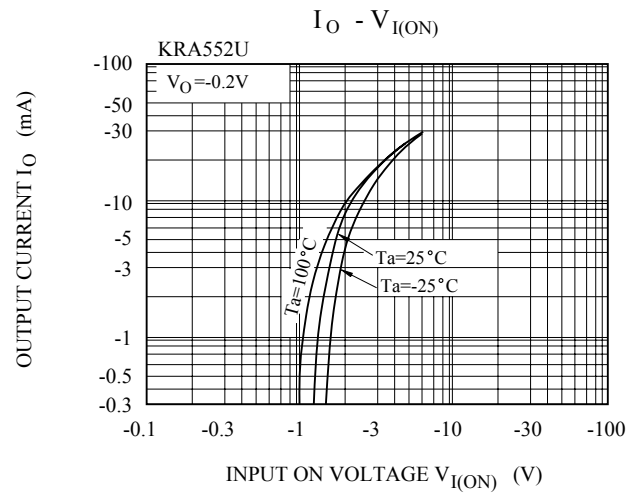
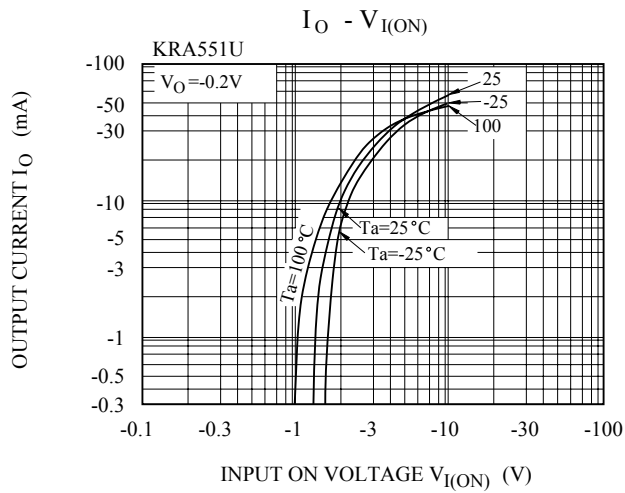
Note : \* Characteristic of Transistor Only.

# KRA551U~KRA556U

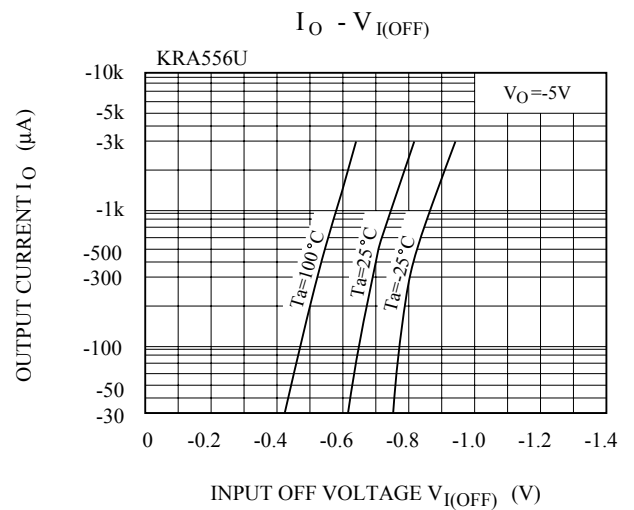
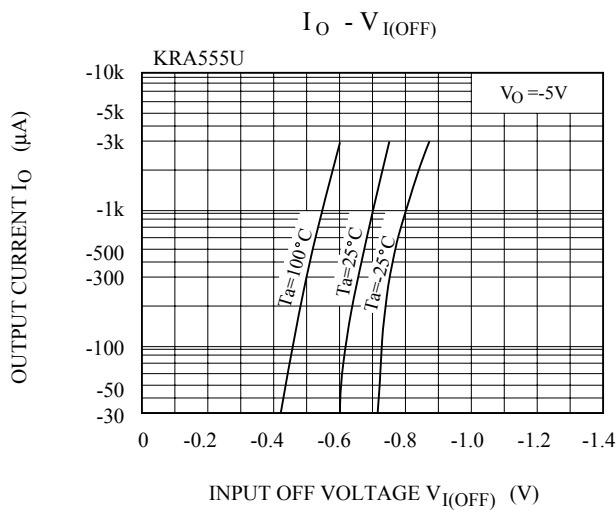
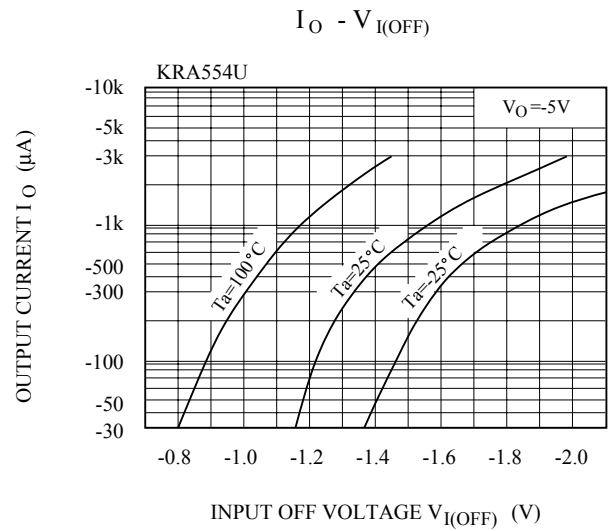
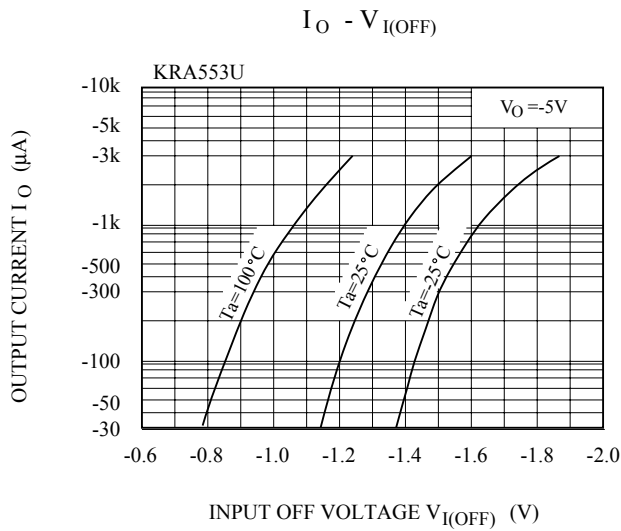
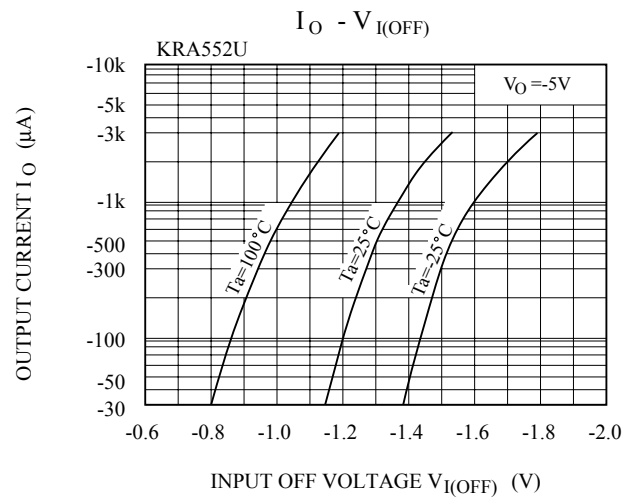
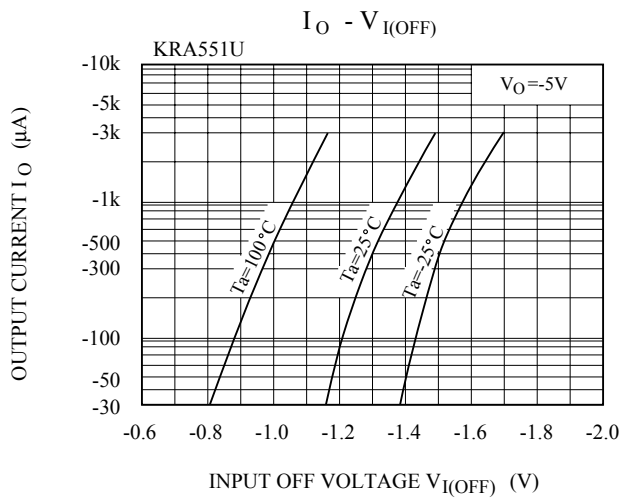
## ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRA551U	t <sub>r</sub>	V <sub>O</sub> =-5V V <sub>IN</sub> =-5V R <sub>L</sub> =1kΩ	-	0.07	-	μS
		KRA552U			-	0.06	-	
		KRA553U			-	0.2	-	
		KRA554U			-	0.24	-	
		KRA555U			-	0.02	-	
		KRA556U			-	0.07	-	
	Storage Time	KRA551U	t <sub>stg</sub>		-	1.1	-	
		KRA552U			-	1.1	-	
		KRA553U			-	1.1	-	
		KRA554U			-	1.1	-	
		KRA555U			-	1.1	-	
		KRA556U			-	1.1	-	
	Fall Time	KRA551U	t <sub>f</sub>		-	0.15	-	
		KRA552U			-	0.24	-	
		KRA553U			-	0.38	-	
		KRA554U			-	0.63	-	
		KRA555U			-	0.1	-	
		KRA556U			-	0.2	-	

# KRA551U~KRA556U



# KRA551U~KRA556U



# KRA551U~KRA556U

