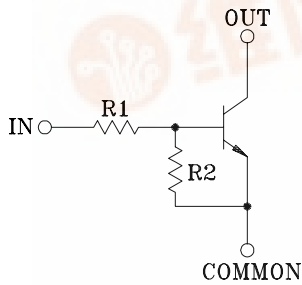


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

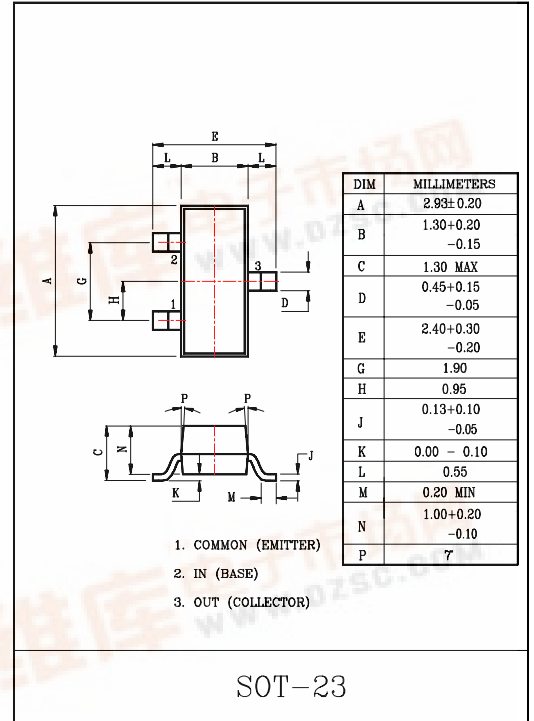
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

TYPE NO.	R1(kΩ)	R2(kΩ)
KRC101S	4.7	4.7
KRC102S	10	10
KRC103S	22	22
KRC104S	47	47
KRC105S	2.2	47
KRC106S	4.7	47



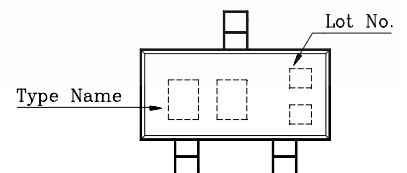
### MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC101S ~ 106S	V <sub>O</sub>	50	V
Input Voltage	KRC101S	V <sub>I</sub>	20, -10	V
	KRC102S		30, -10	
	KRC103S		40, -10	
	KRC104S		40, -10	
	KRC105S		12, -5	
	KRC106S		20, -5	
Output Current	KRC101S ~ 106S	I <sub>O</sub>	100	mA
Power Dissipation		P <sub>D</sub>	200	mW
Junction Temperature		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	-55 ~ 150	°C

### MARK SPEC

TYPE	KRC101S	KRC102S	KRC103S	KRC104S	KRC105S	KRC106S
MARK	NA	NB	NC	ND	NE	NF

### Marking



# KRC101S ~ KRC106S

## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC101S~106S	I <sub>O(OFF)</sub>	V <sub>O</sub> =50V, V <sub>I</sub> =0	-	-	500	nA
DC Current Gain	KRC101S	G <sub>I</sub>	V <sub>O</sub> =5V, I <sub>O</sub> =10mA	30	55	-	
	KRC102S			50	80	-	
	KRC103S			70	120	-	
	KRC104S			80	200	-	
	KRC105S			80	200	-	
	KRC106S			80	200	-	
Output Voltage	KRC101S~106S	V <sub>O(ON)</sub>	I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	0.1	0.3	V
Input Voltage (ON)	KRC101S	V <sub>I(ON)</sub>	V <sub>O</sub> =0.2V, I <sub>O</sub> =5mA	-	1.5	2.0	V
	KRC102S			-	1.8	2.4	
	KRC103S			-	2.1	3.0	
	KRC104S			-	2.8	5.0	
	KRC105S			-	0.8	1.1	
	KRC106S			-	0.9	1.3	
Input Voltage (OFF)	KRC101S~104S	V <sub>I(OFF)</sub>	V <sub>O</sub> =5V, I <sub>O</sub> =0.1mA	1.0	1.2	-	V
	KRC105S~106S			0.5	0.65	-	
Transition Frequency	KRC101S~106S	f <sub>T</sub> *	V <sub>O</sub> =10V, I <sub>O</sub> =5mA	-	200	-	MHz
Input Current	KRC101S	I <sub>I</sub>	V <sub>I</sub> =5V	-	-	1.8	mA
	KRC102S			-	-	0.88	
	KRC103S			-	-	0.36	
	KRC104S			-	-	0.18	
	KRC105S			-	-	3.6	
	KRC106S			-	-	1.8	

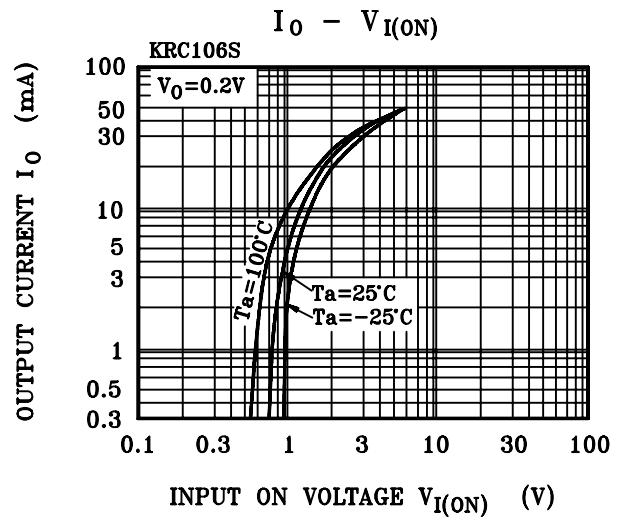
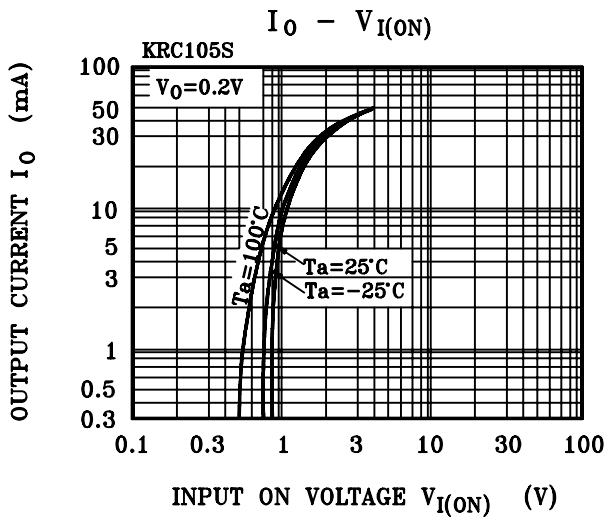
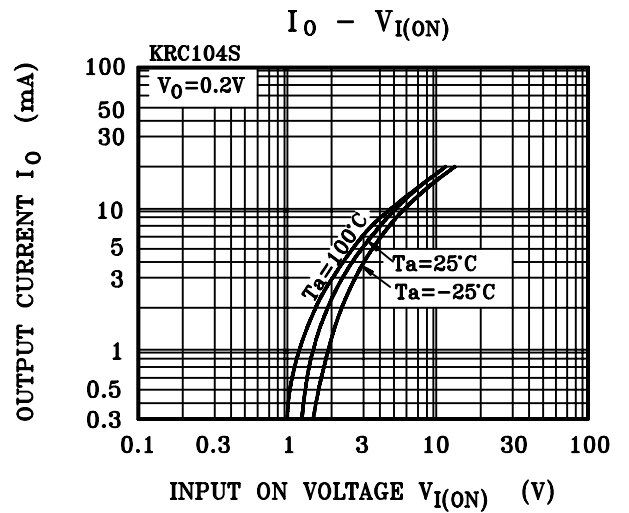
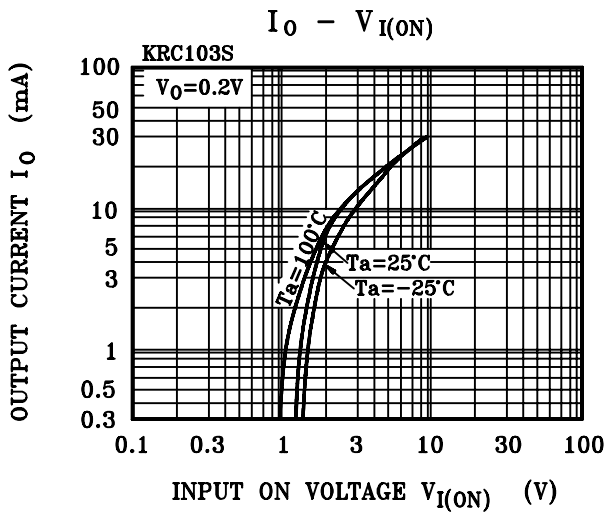
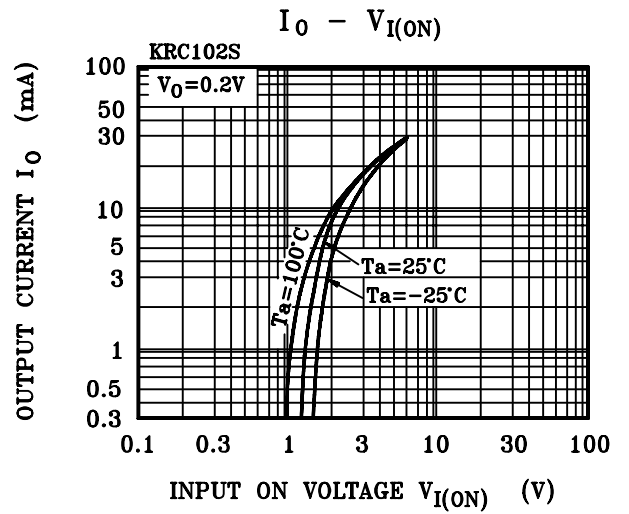
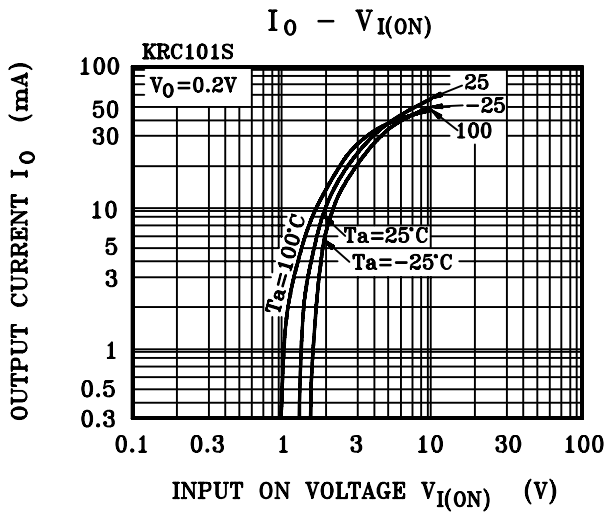
Note : \*Characteristic of Transistor Only

# KRC101S ~ KRC106S

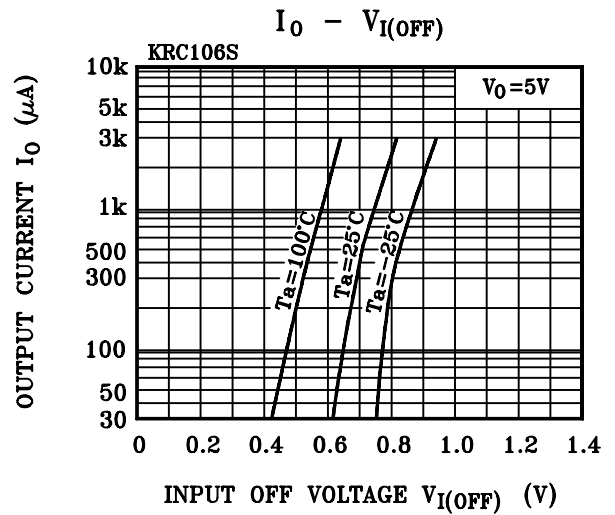
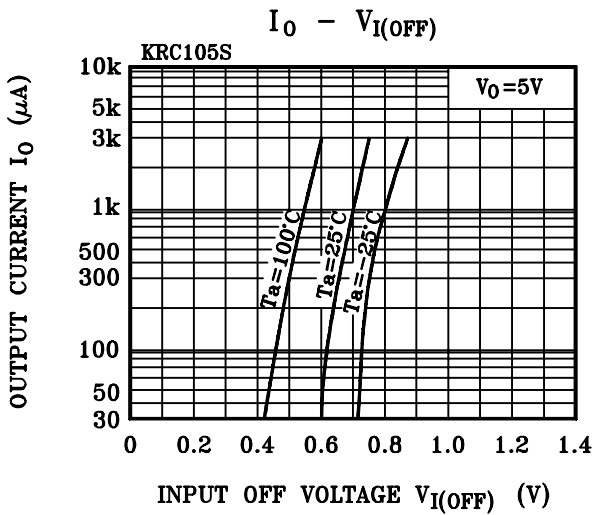
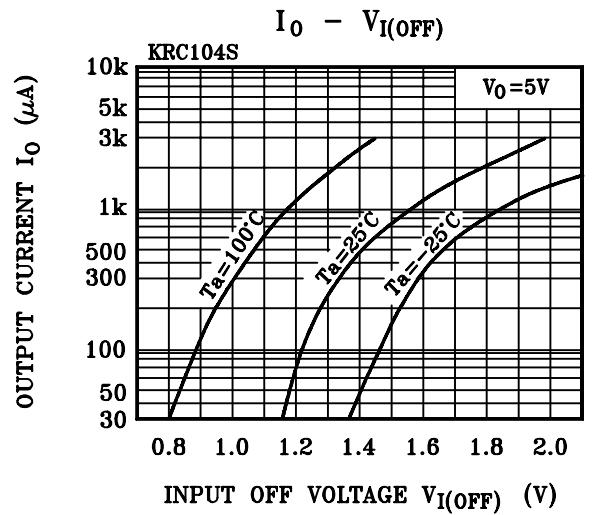
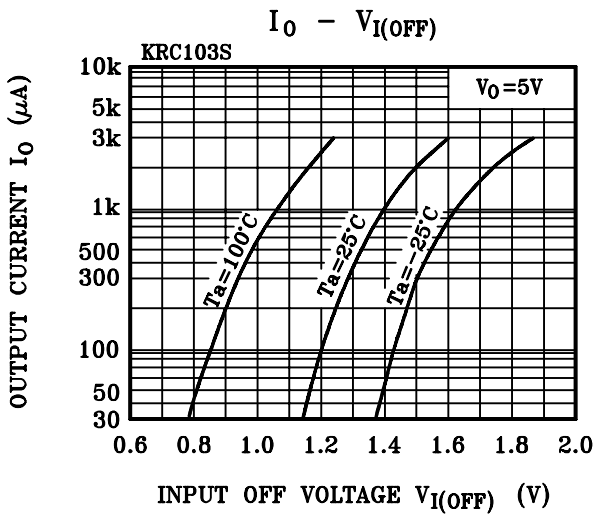
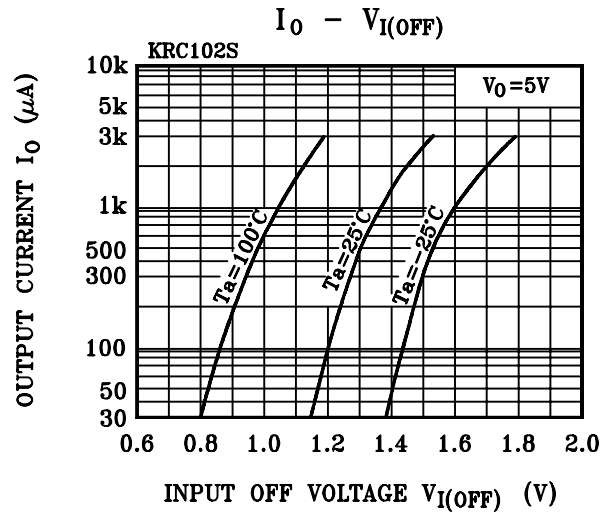
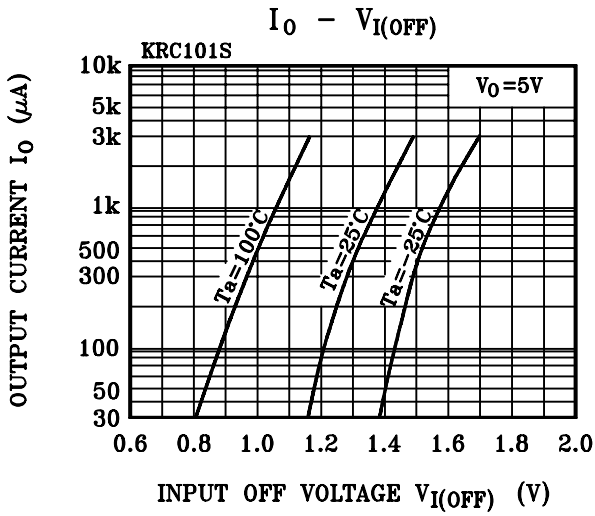
## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC101S	V <sub>O</sub> =5V V <sub>IN</sub> =5V R <sub>L</sub> =1kΩ	-	0.03	-	μS
		KRC102S		-	0.05	-	
		KRC103S		-	0.12	-	
		KRC104S		-	0.22	-	
		KRC105S		-	0.01	-	
		KRC106S		-	0.03	-	
	Storage Time	KRC101S		-	2.0	-	
		KRC102S		-	2.0	-	
		KRC103S		-	2.0	-	
		KRC104S		-	2.0	-	
		KRC105S		-	2.0	-	
		KRC106S		-	2.0	-	
	Fall Time	KRC101S		-	0.12	-	
		KRC102S		-	0.36	-	
		KRC103S		-	0.35	-	
		KRC104S		-	0.6	-	
		KRC105S		-	0.1	-	
		KRC106S		-	0.19	-	

# KRC101S ~ KRC106S



# KRC101S ~ KRC106S



# KRC101S ~ KRC106S

