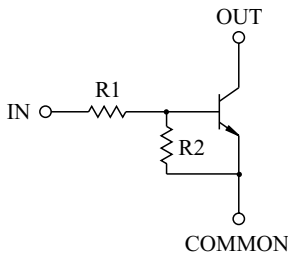


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

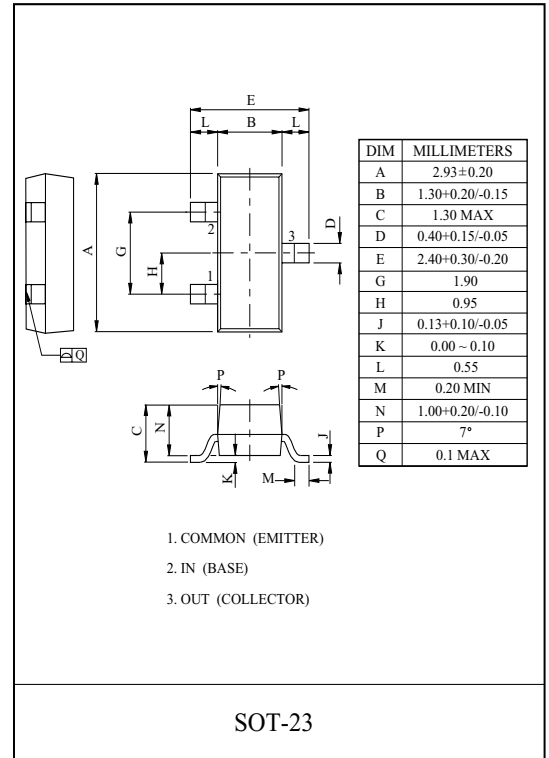
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

TYPE NO.	R1(k $\Omega$ )	R2(k $\Omega$ )
KRC101S	4.7	4.7
KRC102S	10	10
KRC103S	22	22
KRC104S	47	47
KRC105S	2.2	47
KRC106S	4.7	47

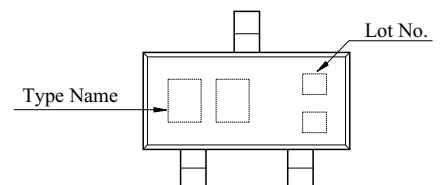


### MAXIMUM RATING (Ta=25 $^{\circ}$ C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC101S 106S	$V_O$	50	V
Input Voltage	KRC101S	$V_I$	20, -10	V
	KRC102S		30, -10	
	KRC103S		40, -10	
	KRC104S		40, -10	
	KRC105S		12, -5	
	KRC106S		20, -5	
Output Current	KRC101S 106S	$I_O$	100	mA
Power Dissipation		$P_D$	200	mW
Junction Temperature		$T_j$	150	
Storage Temperature Range		$T_{stg}$	-55 150	

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

### Marking



# KRC101S~KRC106S

## ELECTRICAL CHARACTERISTICS (Ta=25 )

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC101S 106S	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC101S	$G_I$	$V_O=5V, I_O=10mA$	30	55	-	
	KRC102S			50	80	-	
	KRC103S			70	120	-	
	KRC104S			80	200	-	
	KRC105S			80	200	-	
	KRC106S			80	200	-	
Output Voltage	KRC101S 106S	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC101S	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	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	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	1.0	1.2	-	V
	KRC105S 106S			0.5	0.65	-	
Transition Frequency	KRC101S 106S	$f_T^*$	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	KRC101S	$I_I$	$V_I=5V$	-	-	1.8	mA
	KRC102S			-	-	0.88	
	KRC103S			-	-	0.36	
	KRC104S			-	-	0.18	
	KRC105S			-	-	3.6	
	KRC106S			-	-	1.8	
Input Resistor	KRC101S	R1	-	3.29	4.7	6.11	k
	KRC102S			7	10	13	
	KRC103S			15.4	22	28.6	
	KRC104S			32.9	47	61.1	
	KRC105S			1.54	2.2	2.86	
	KRC106S			3.29	4.7	6.11	
Resistor Ratio	KRC101S~104S	R2/R1	-	0.8	1.0	1.2	
	KRC105S			17	21	26	
	KRC106S			8	10	12	

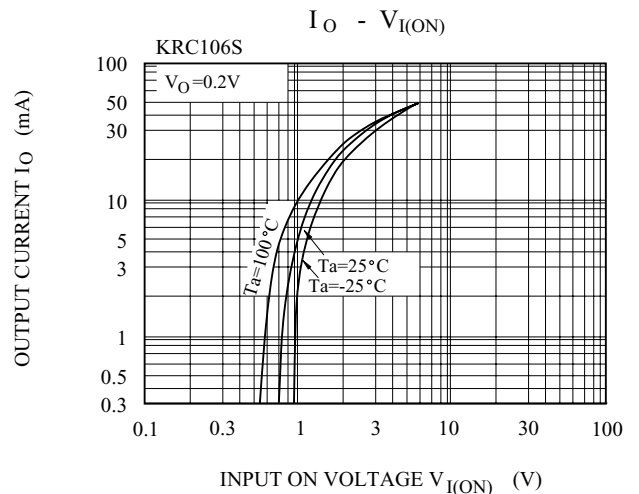
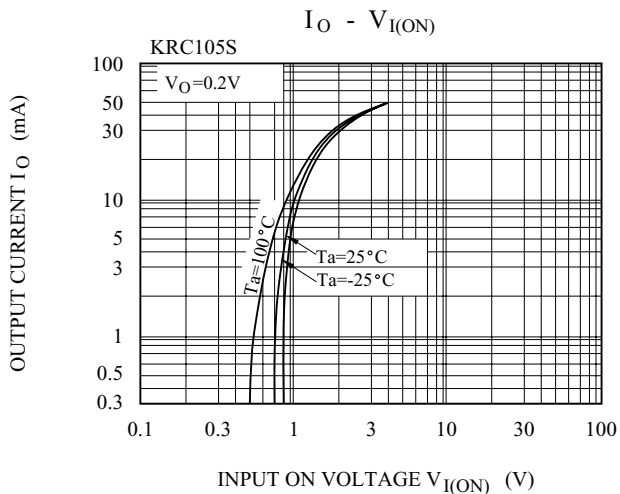
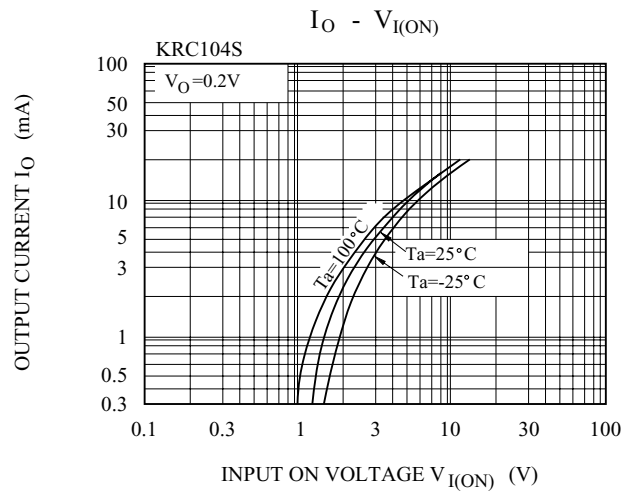
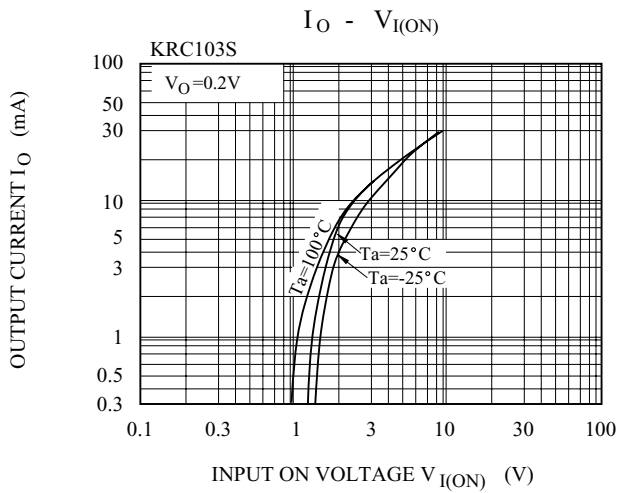
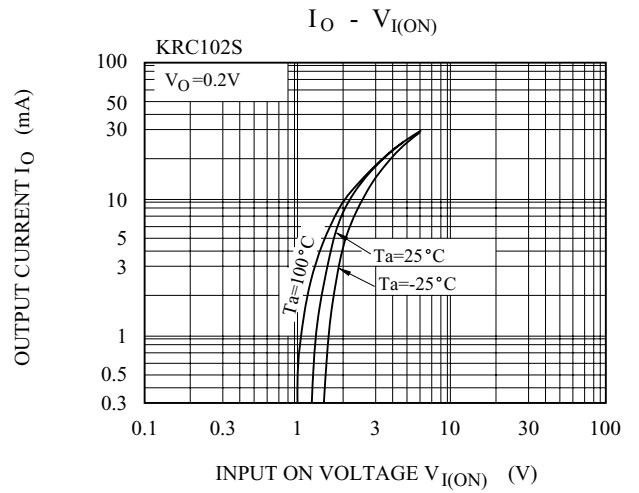
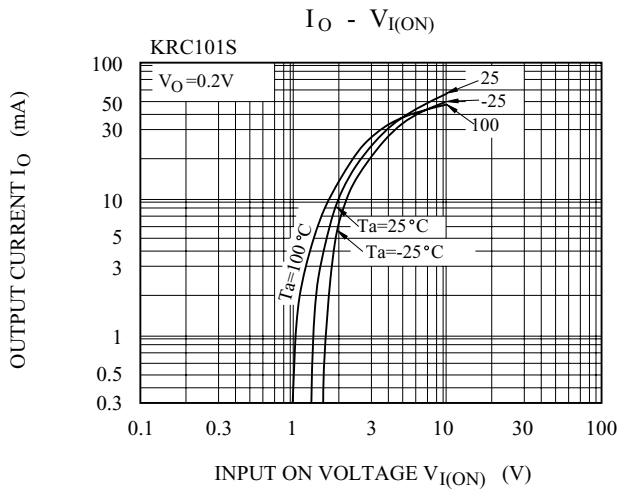
Note : \* Characteristic of Transistor Only.

# KRC101S~KRC106S

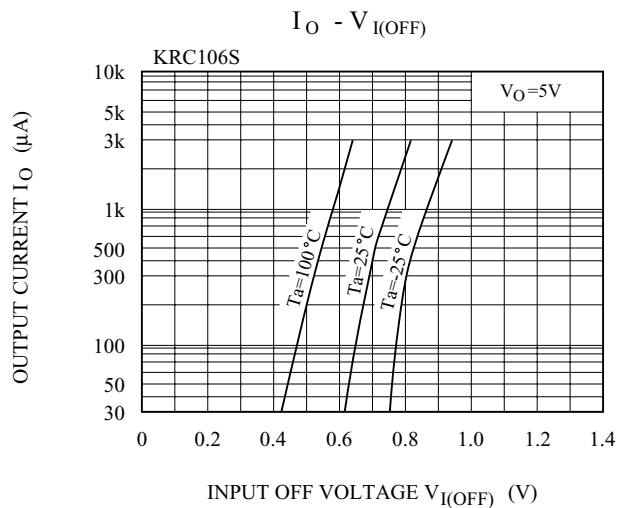
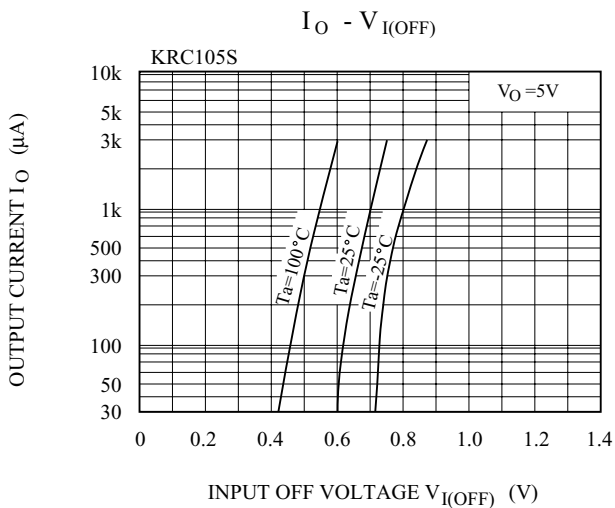
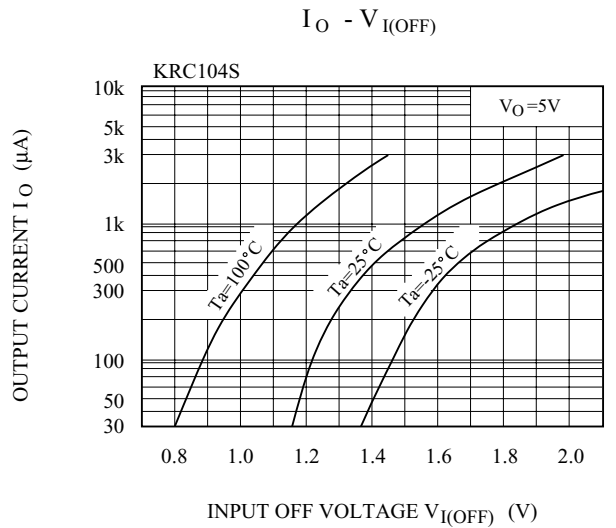
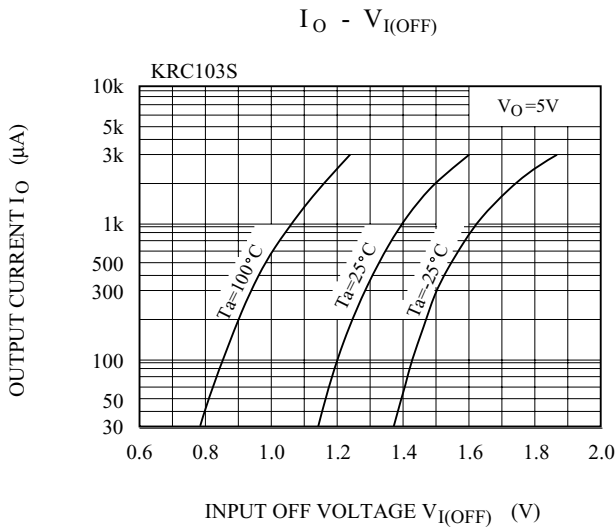
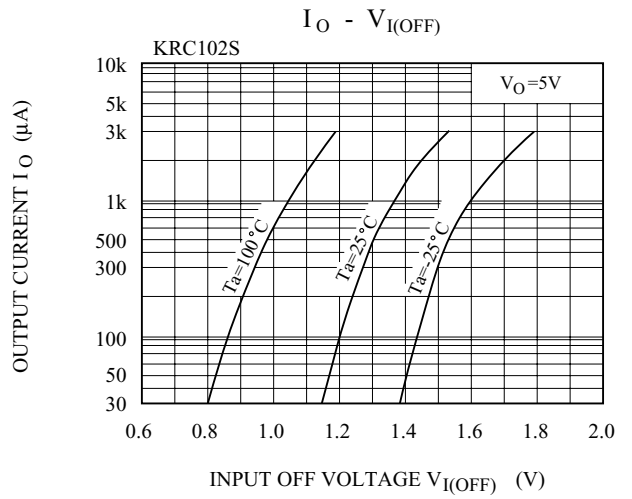
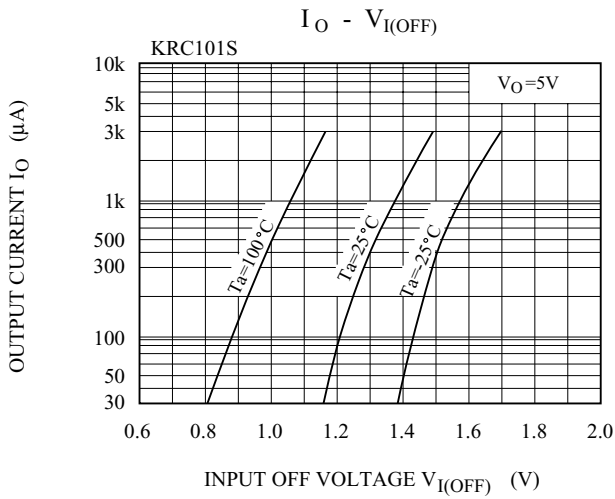
## ELECTRICAL CHARACTERISTICS (Ta=25 )

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> =1k	-	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

