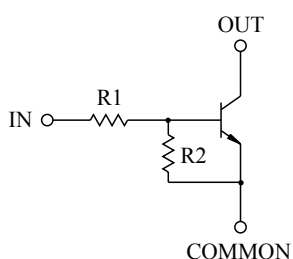


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

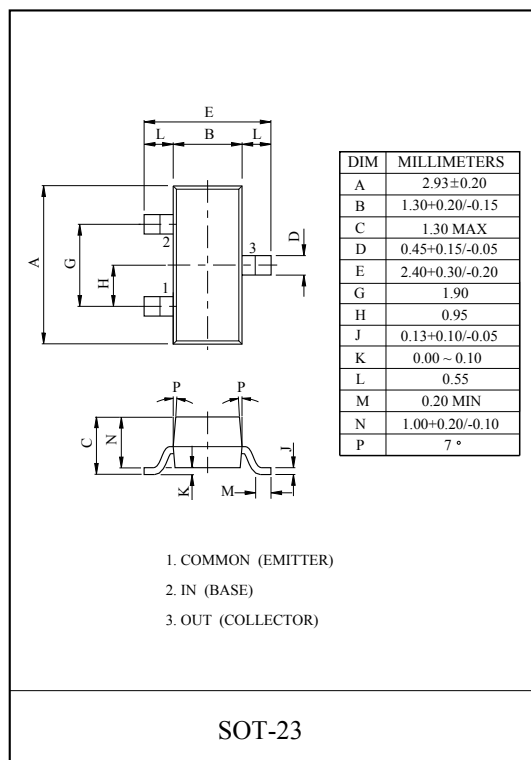
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

TYPE NO.	R1(k $\Omega$ )	R2(k $\Omega$ )
KRC107S	10	47
KRC108S	22	47
KRC109S	47	22



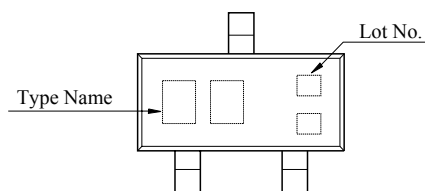
### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC107S ~ 109S	$V_O$	50	V
Input Voltage	KRC107S	$V_I$	30, -6	V
	KRC108S		40, -7	
	KRC109S		40, -15	
Output Current	KRC107S ~ 109S	$I_O$	100	mA
Power Dissipation		$P_D$	200	mW
Junction Temperature		$T_j$	150	°C
Storage Temperature Range		$T_{stg}$	-55 ~ 150	°C

### MARK SPEC

TYPE	KRC107S	KRC108S	KRC109S
MARK	NH	NI	NJ

### Marking



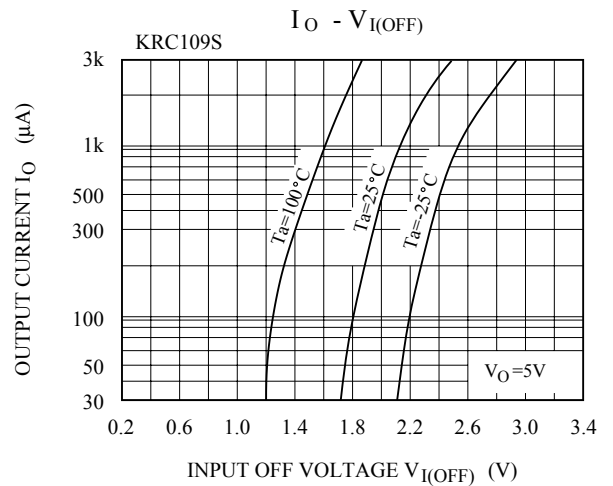
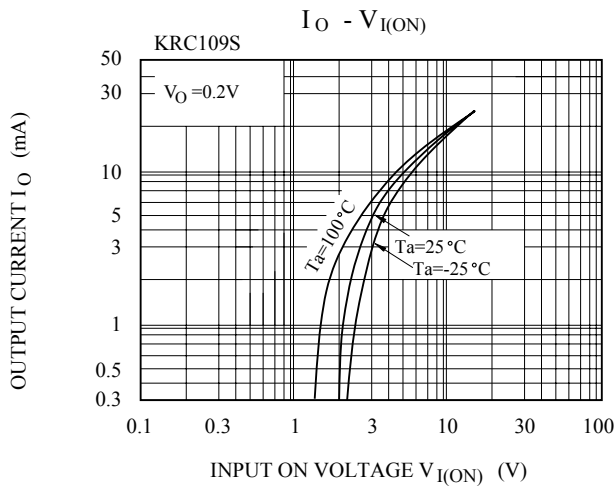
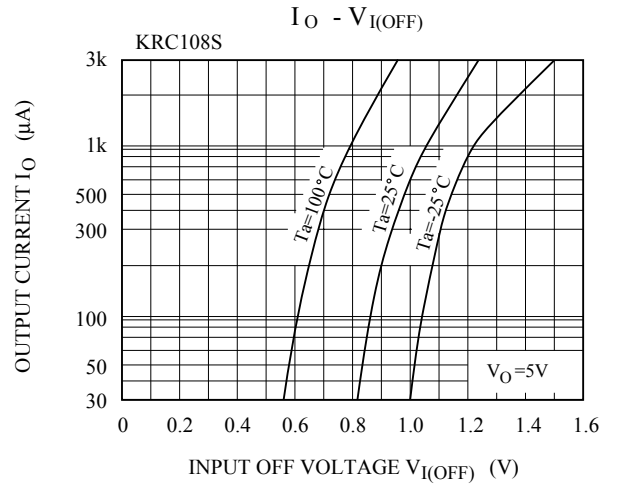
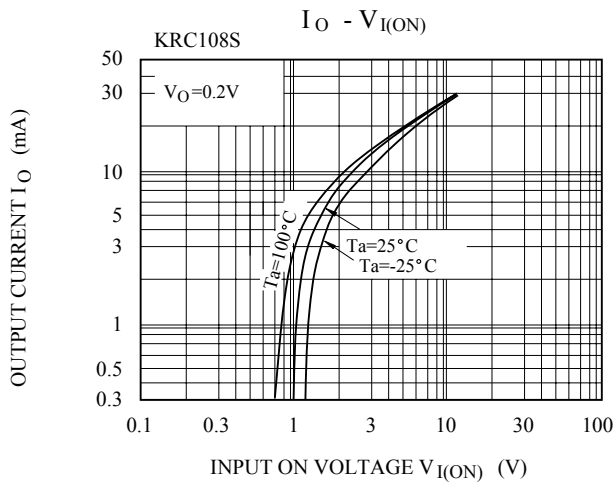
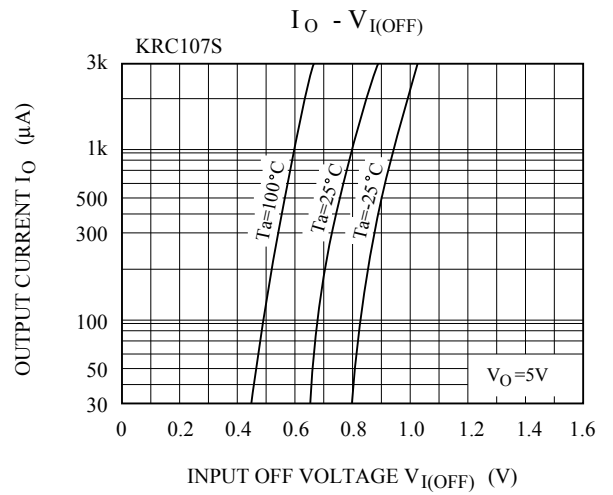
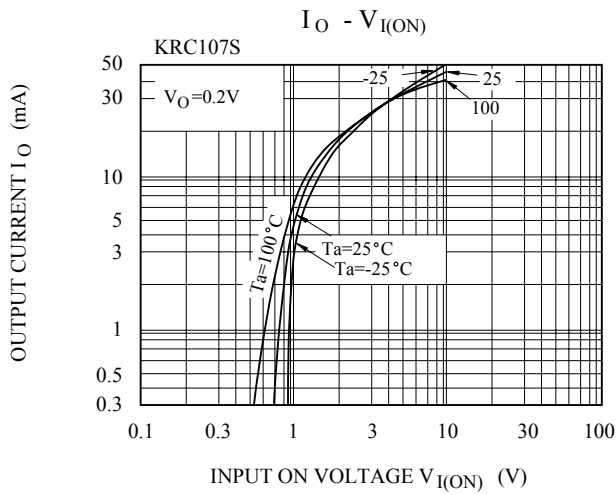
# KRC107S~KRC109S

## ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Output Cut-off Current		KRC107S ~ 109S	I <sub>O(OFF)</sub>	V <sub>O</sub> =50V, V <sub>I</sub> =0	-	-	500	nA	
DC Current Gain	KRC107S	G <sub>I</sub>	V <sub>O</sub> =5V, I <sub>O</sub> =10mA	80	150	-			
	KRC108S			80	150	-			
	KRC109S			70	140	-			
Output Voltage		KRC107S ~ 109S	V <sub>O(ON)</sub>	I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	0.1	0.3	V	
Input Voltage (ON)	KRC107S	V <sub>I(ON)</sub>	V <sub>O</sub> =0.2V, I <sub>O</sub> =5mA	-	1.2	1.8	V		
	KRC108S			-	1.8	2.6			
	KRC109S			-	3.0	5.8			
Input Votlage (OFF)	KRC107S	V <sub>I(OFF)</sub>	V <sub>O</sub> =5V, I <sub>O</sub> =0.1mA	0.5	0.75	-	V		
	KRC108S			0.6	0.88	-			
	KRC109S			1.5	1.82	-			
Transition Frequency		KRC107S ~ 109S	f <sub>T</sub> *	V <sub>O</sub> =10V, I <sub>O</sub> =5mA	-	200	-	MHz	
Input Current	KRC107S	I <sub>I</sub>	V <sub>I</sub> =5V	-	-	0.88	mA		
	KRC108S			-	-	0.36			
	KRC109S			-	-	0.16			
Switching Time	Rise Time	KRC107S	t <sub>r</sub>	V <sub>O</sub> =5V, V <sub>IN</sub> =5V R <sub>L</sub> =1kΩ	-	0.05	-	μS	
		KRC108S			-	0.12	-		
		KRC109S			-	0.26	-		
	Storage Time	KRC107S			t <sub>stg</sub>	-	2.0		-
		KRC108S				-	2.4		-
		KRC109S				-	1.5		-
	Fall Time	KRC107S			t <sub>f</sub>	-	0.36		-
		KRC108S				-	0.4		-
		KRC109S				-	0.41		-

Note : \* Characteristic of Transistor Only.

# KRC107S~KRC109S



# KRC107S~KRC109S

