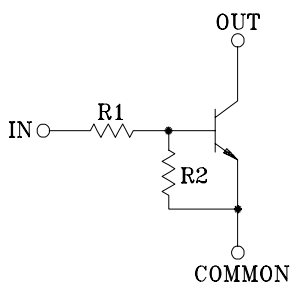


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

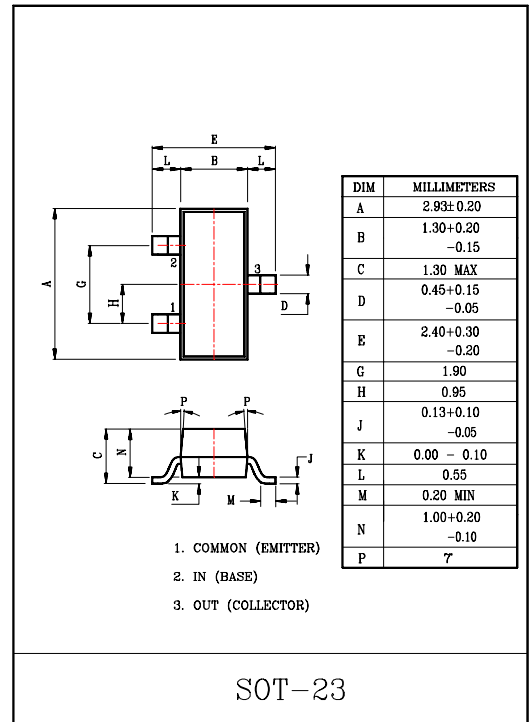
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

TYPE NO.	R1(kΩ)	R2(kΩ)
KRC107S	10	47
KRC108S	22	47
KRC109S	47	22



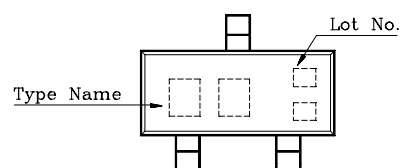
### MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC107S ~109S	V <sub>O</sub>	50	V
Input Voltage	KRC107S	V <sub>I</sub>	30, -6	V
	KRC108S		40, -7	
	KRC109S		40, -15	
Output Current	KRC107S ~109S	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	KRC107S	KRC108S	KRC109S
MARK	NH	NI	NJ

### Marking



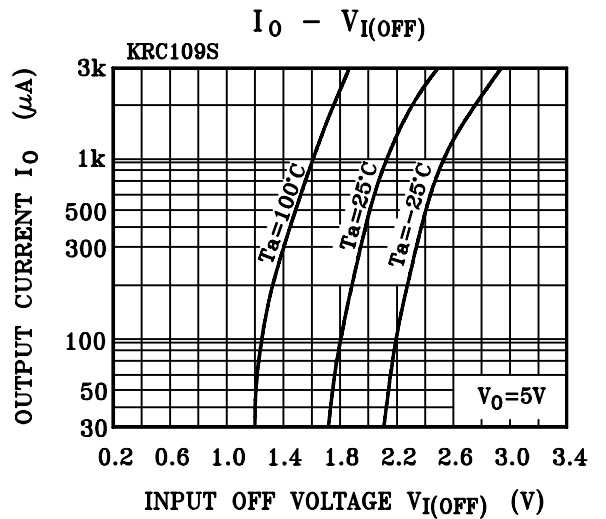
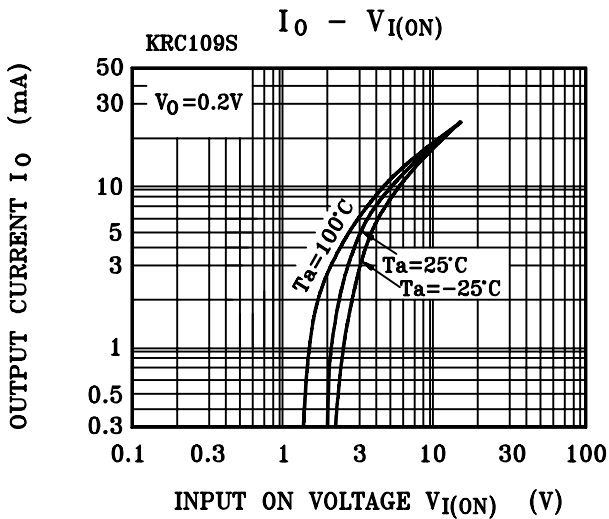
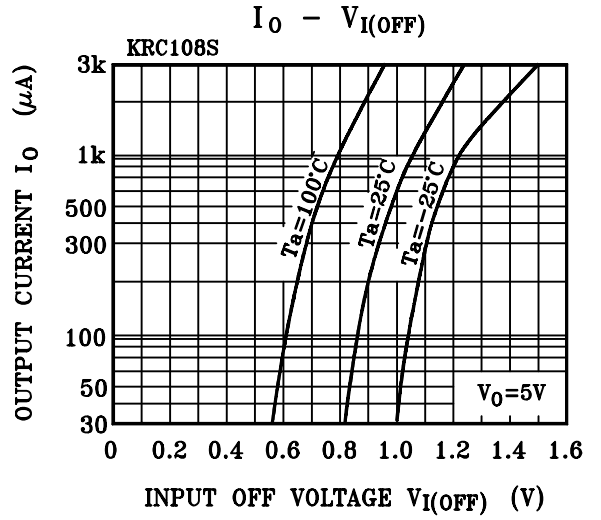
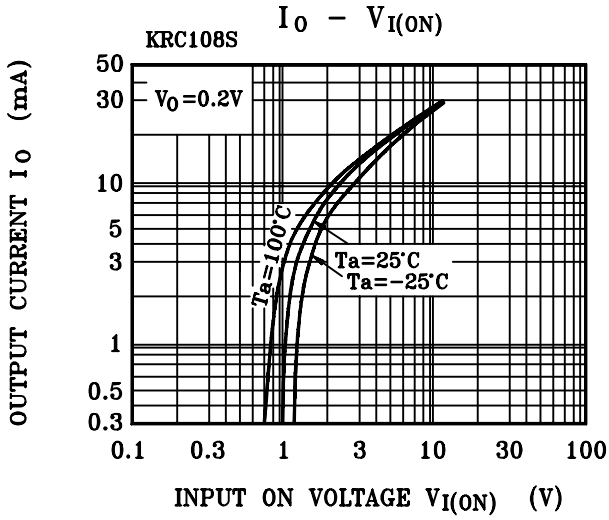
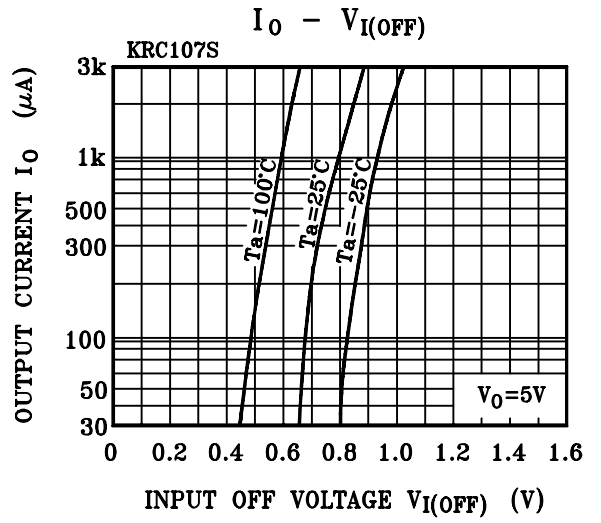
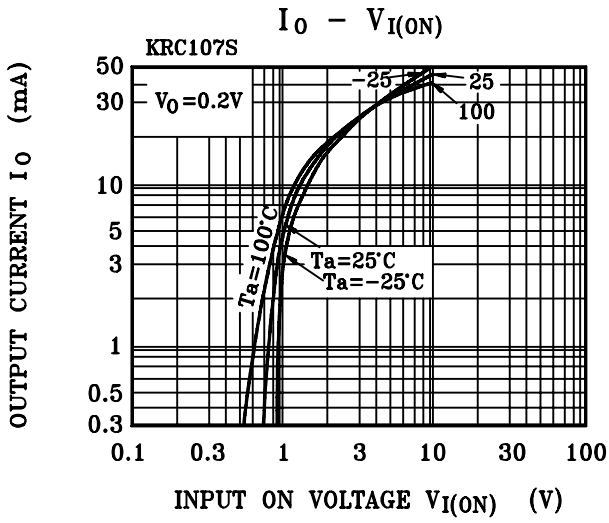
# KRC107S ~ KRC109S

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Output Cut-off Current		KRC107S~109S	$I_{O(OFF)}$	$V_0=50V, V_1=0$	-	-	500	nA	
DC Current Gain	KRC107S	$G_T$	$V_0=5V, I_0=10mA$	80	150	-			
	KRC108S			80	150	-			
	KRC109S			70	140	-			
Output Voltage		KRC107S~109S	$V_{O(ON)}$	$I_0=10mA, I_1=0.5mA$	-	0.1	0.3	V	
Input Voltage (ON)	KRC107S	$V_{I(ON)}$	$V_0=0.2V, I_0=5mA$	-	1.2	1.8	V		
	KRC108S			-	1.8	2.6			
	KRC109S			-	3.0	5.8			
Input Voltage (OFF)	KRC107S	$V_{I(OFF)}$	$V_0=5V, I_0=0.1mA$	0.5	0.75	-	V		
	KRC108S			0.6	0.88	-			
	KRC109S			1.5	1.82	-			
Transition Frequency		KRC107S~109S	$f_T *$	$V_0=10V, I_0=5mA$	-	200	-	MHz	
Input Current	KRC107S	$I_I$	$V_1=5V$	-	-	0.88	mA		
	KRC108S			-	-	0.36			
	KRC109S			-	-	0.16			
Switching Time	Rise Time	KRC107S	$t_r$	$V_0=5V, V_{IN}=5V$ $R_L=1k\Omega$	-	0.05	-	$\mu S$	
		KRC108S			-	0.12	-		
		KRC109S			-	0.26	-		
	Storage Time	KRC107S			$t_{stg}$	-	2.0		-
		KRC108S				-	2.4		-
		KRC109S				-	1.5		-
	Fall Time	KRC107S			$t_f$	-	0.36		-
		KRC108S				-	0.4		-
		KRC109S				-	0.41		-

Note : \*Characteristic of Transistor Only

# KRC107S ~ KRC109S



# KRC107S ~ KRC109S

