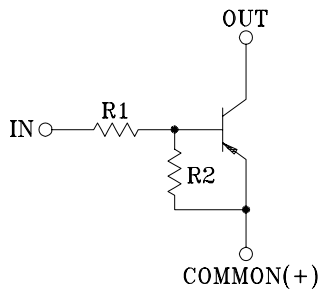


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

#### FEATURES

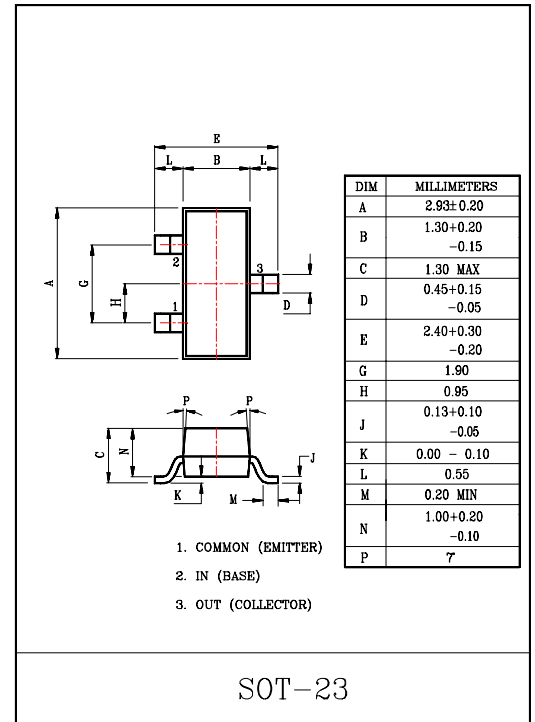
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process

#### EQUIVALENT CIRCUIT



#### BIAS RESISTOR VALUES

TYPE NO.	R1(kΩ)	R2(kΩ)
KRA107S	10	47
KRA108S	22	47
KRA109S	47	22



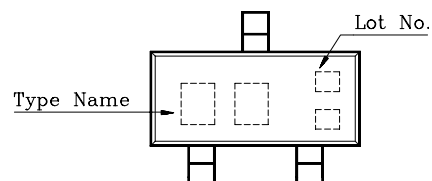
#### MAXIMUM RATINGS(Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA107S~109S	V <sub>o</sub>	-50	V
Input Voltage	KRA107S	V <sub>i</sub>	-30, 6	V
	KRA108S		-40, 7	
	KRA109S		-40, 15	
Output Current	KRA107S~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	KRA107S	KRA108S	KRA109S
MARK	PH	PI	PJ

#### Marking



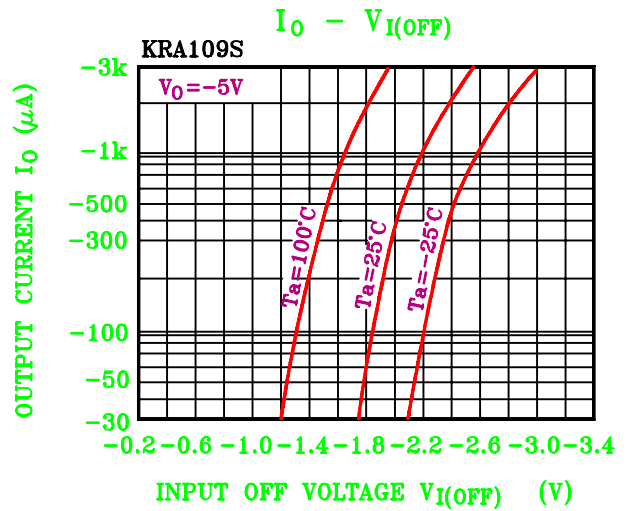
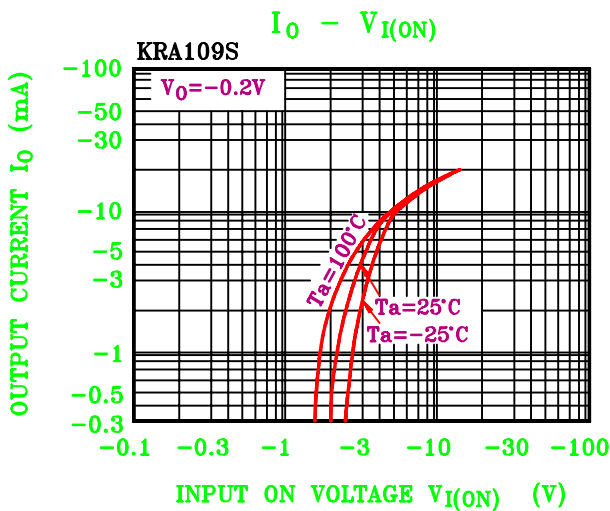
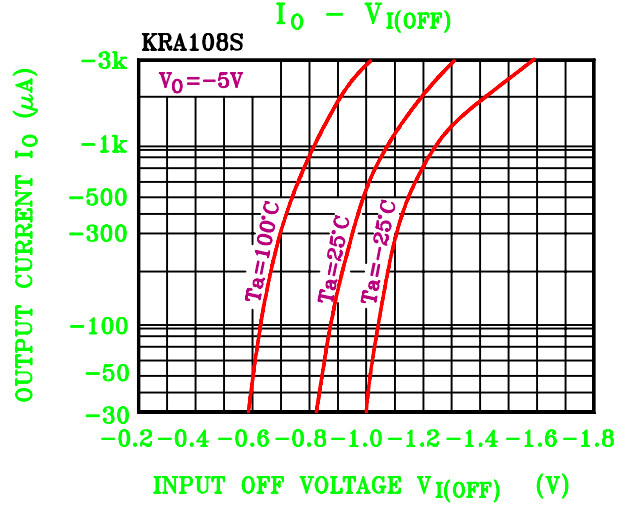
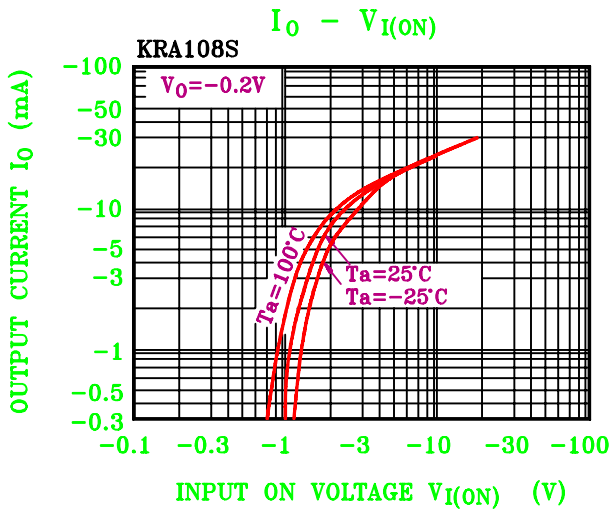
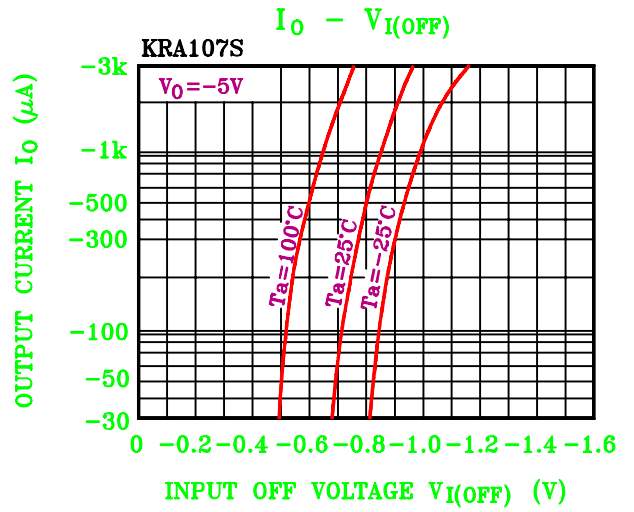
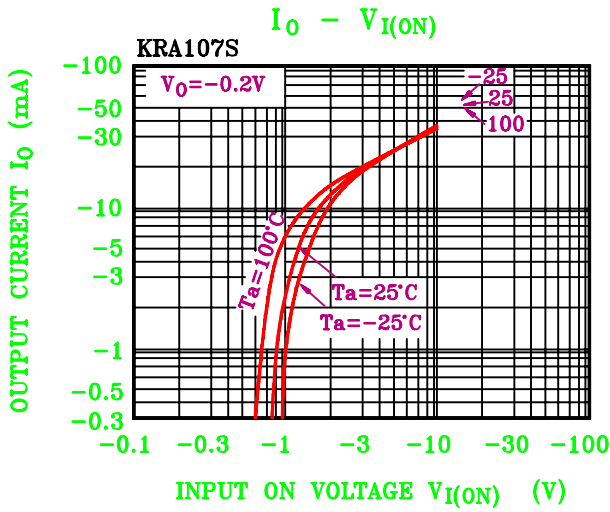
# KRA107S ~ KRA109S

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Cut-off Current	KRA107S ~ 109S	$I_{O(OFF)}$	$V_O = -50V, V_I = 0$	-	-	-500	nA	
DC Current Gain	KRA107S	$G_I$	$V_O = -5V, I_O = -10mA$	80	150	-		
	KRA108S			80	150	-		
	KRA109S			70	140	-		
Output Voltage	KRA107S ~ 109S	$V_{O(ON)}$	$I_O = -10mA, I_I = -0.5mA$	-	-0.1	-0.3	V	
Input Voltage (ON)	KRA107S	$V_{I(ON)}$	$V_O = -0.2V, I_O = -5mA$	-	-1.2	-1.8	V	
	KRA108S			-	-1.8	-2.6		
	KRA109S			-	-3.0	-5.8		
Input Voltage (OFF)	KRA107S	$V_{I(OFF)}$	$V_O = -5V, I_O = -0.1mA$	-0.5	-0.75	-	V	
	KRA108S			-0.6	-0.88	-		
	KRA109S			-1.5	-1.82	-		
Transition Frequency	KRA107S ~ 109S	$f_T *$	$V_O = -10V, I_O = -5mA$	-	200	-	MHz	
Input Current	KRA107S	$I_I$	$V_I = -5V$	-	-	-0.88	mA	
	KRA108S			-	-	-0.36		
	KRA109S			-	-	-0.16		
Switching Time	Rise Time	KRA107S	$V_O = -5V, V_{IN} = -5V$ $R_L = 1k\Omega$	-	0.07	-	$\mu S$	
		KRA108S		$t_r$	-	0.20		-
		KRA109S		$t_r$	-	0.38		-
	Storage Time	KRA107S		$t_{stg}$	-	1.1		-
		KRA108S			-	1.3		-
		KRA109S			-	0.7		-
	Fall Time	KRA107S		$t_f$	-	0.35		-
		KRA108S			-	0.4		-
		KRA109S			-	0.48		-

Note : \*Characteristic of Transistor Only

# KRA107S ~ KRA109S



# KRA107S ~ KRA109S

