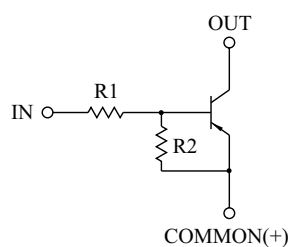


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

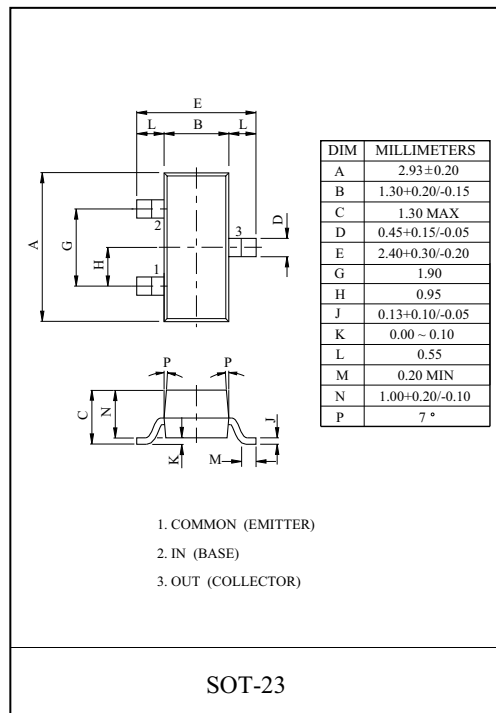
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

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



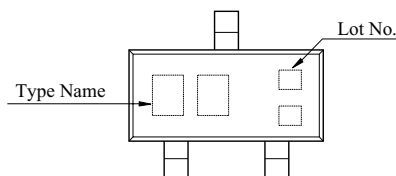
### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA107S ~109S	$V_O$	-50	V
Input Voltage	KRA107S	$V_I$	-30, 6	V
	KRA108S		-40, 7	
	KRA109S		-40, 15	
Output Current	KRA107S ~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	KRA107S	KRA108S	KRA109S
MARK	PH	PI	PJ

### Marking



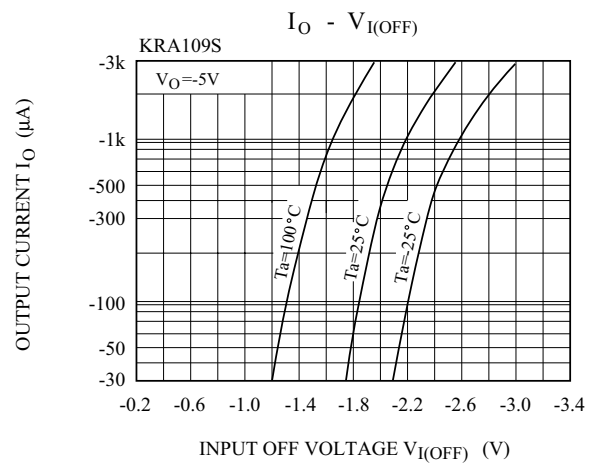
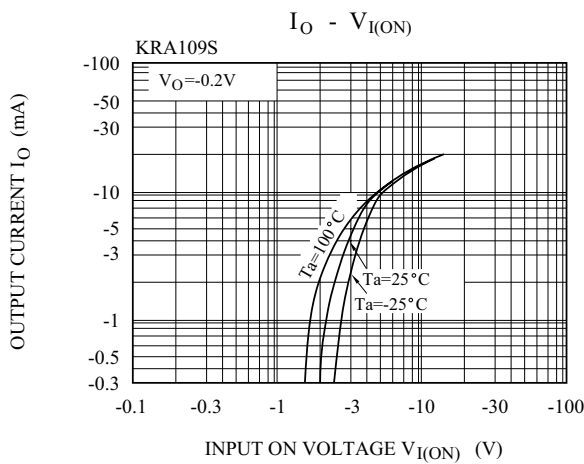
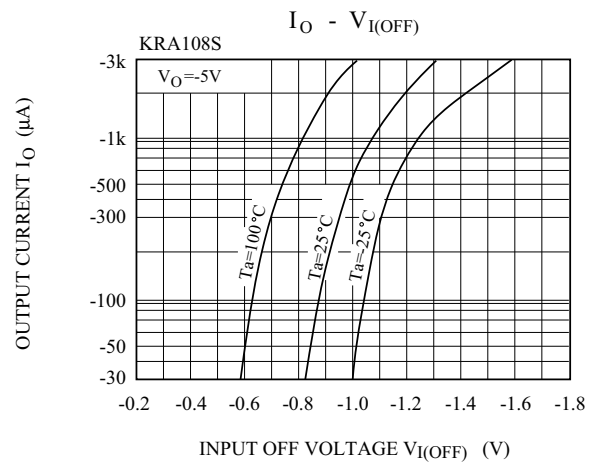
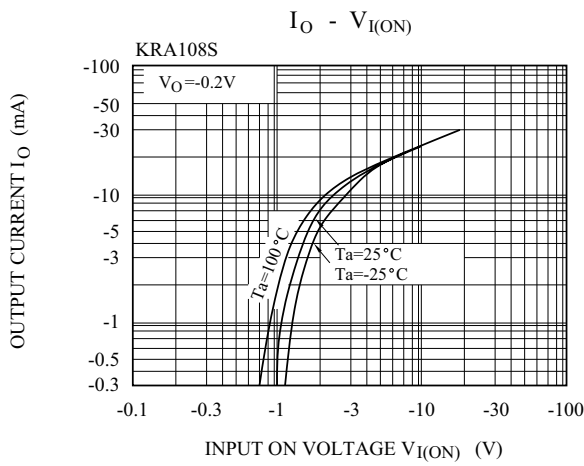
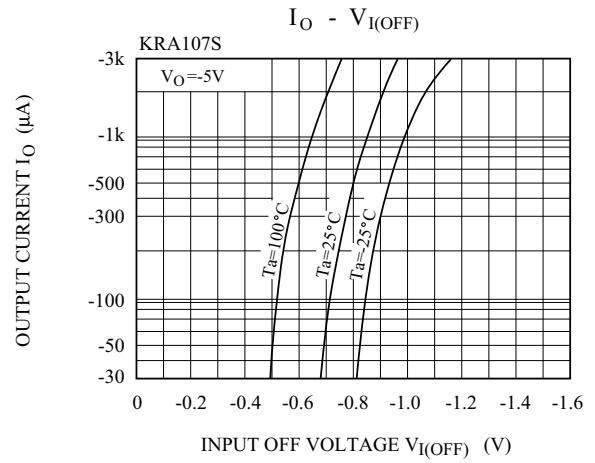
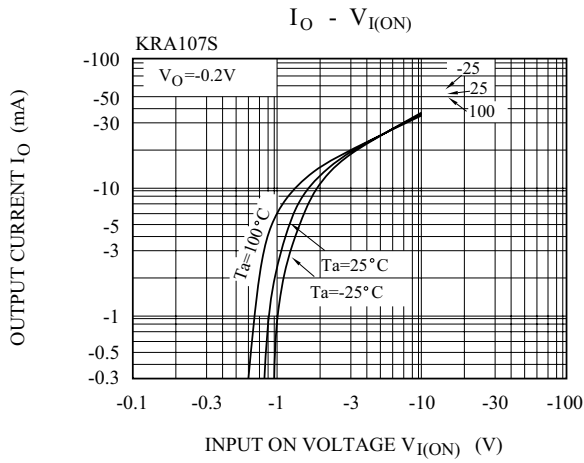
# KRA107S~KRA109S

## 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		-	0.20	-		
		KRA109S		-	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

