

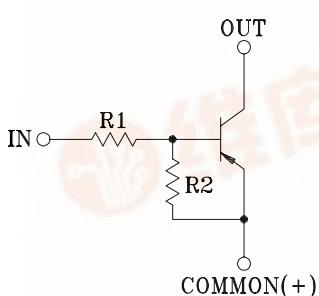
SWITCHING APPLICATION.

INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

#### FEATURES

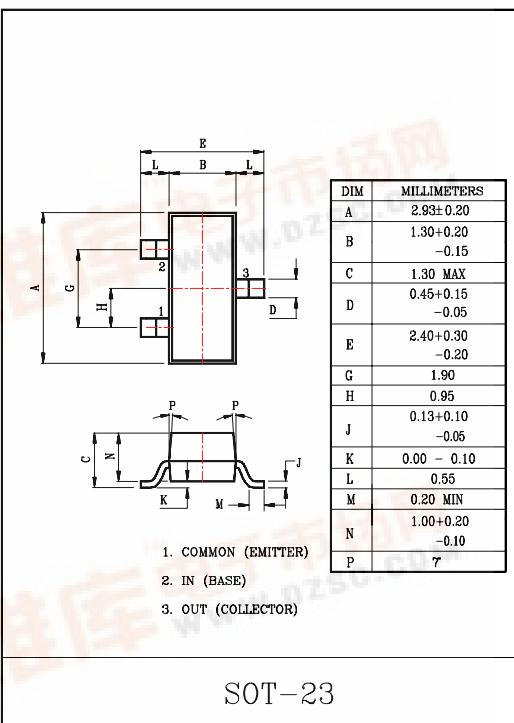
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process

#### EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

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



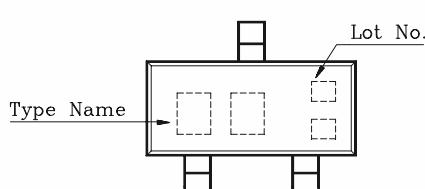
#### MAXIMUM RATINGS(Ta=25°C)

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

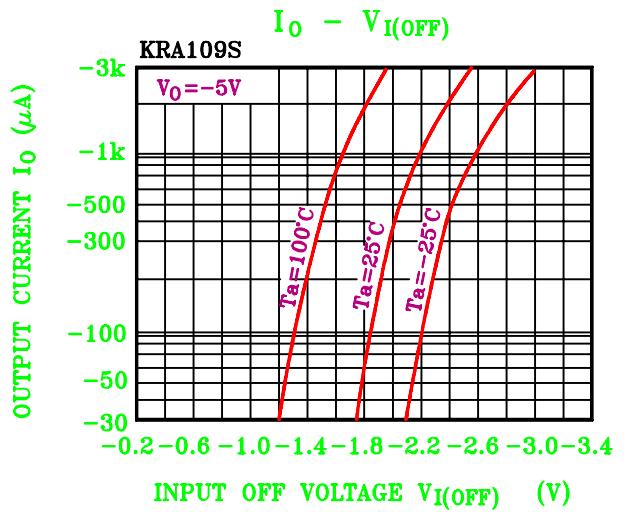
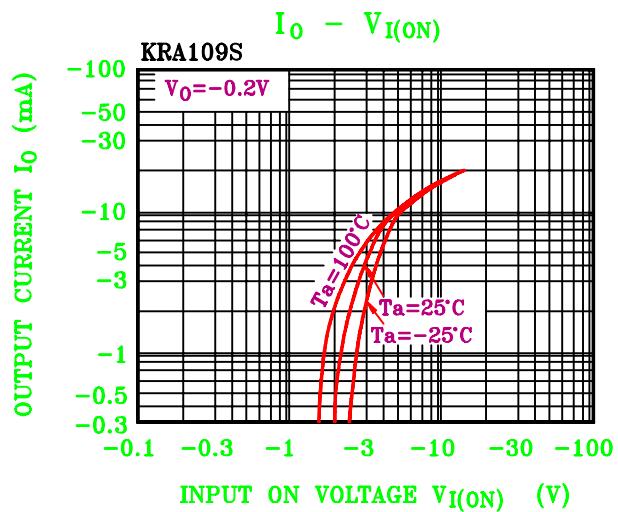
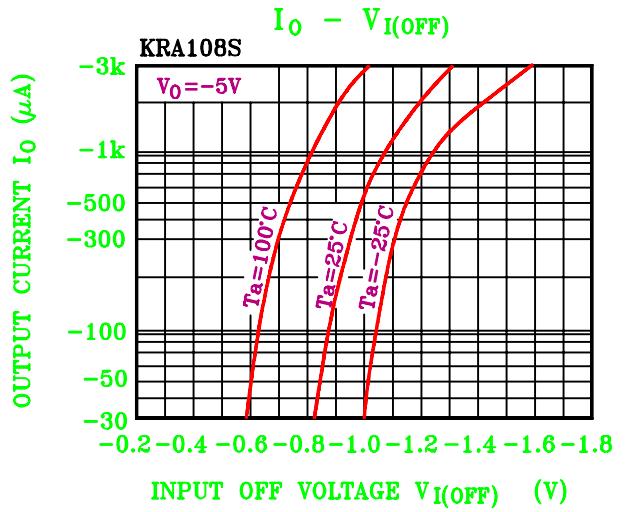
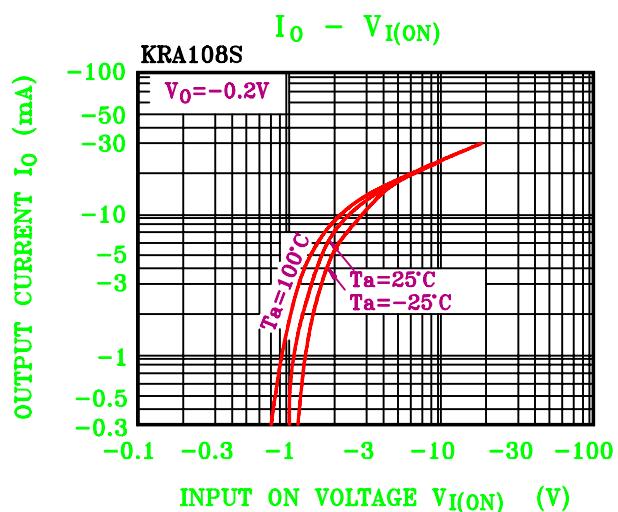
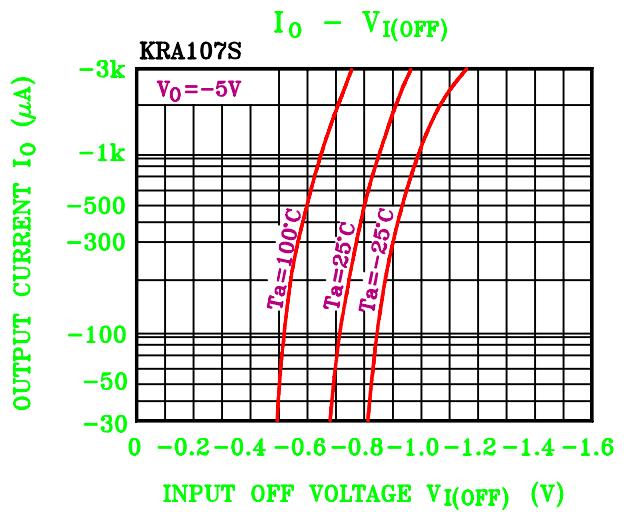
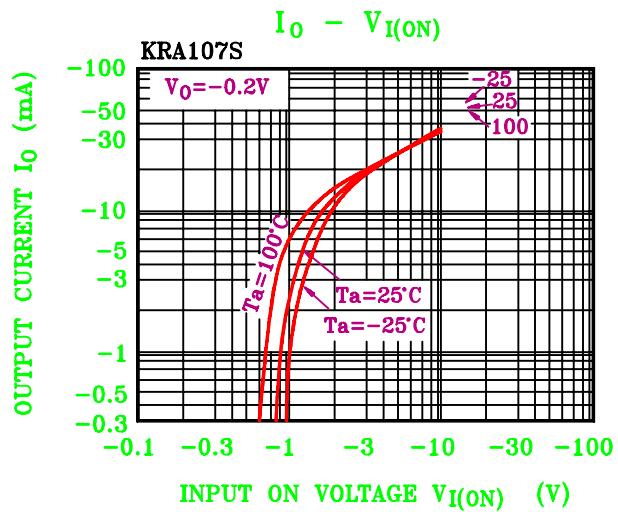
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ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Cut-off Current	KRA107S~109S	I <sub>O(OFF)</sub>	V <sub>O</sub> =-50V, V <sub>I</sub> =0	-	-	-500	nA	
DC Current Gain	KRA107S	G <sub>I</sub>	V <sub>O</sub> =-5V, I <sub>O</sub> =-10mA	80	150	-		
	KRA108S			80	150	-		
	KRA109S			70	140	-		
Output Voltage	KRA107S~109S	V <sub>O(ON)</sub>	I <sub>O</sub> =-10mA, I <sub>L</sub> =-0.5mA	-	-0.1	-0.3	V	
Input Voltage (ON)	KRA107S	V <sub>I(ON)</sub>	V <sub>O</sub> =-0.2V, I <sub>O</sub> =-5mA	-	-1.2	-1.8	V	
	KRA108S			-	-1.8	-2.6		
	KRA109S			-	-3.0	-5.8		
Input Voltage (OFF)	KRA107S	V <sub>I(OFF)</sub>	V <sub>O</sub> =-5V, I <sub>O</sub> =-0.1mA	-0.5	-0.75	-	V	
	KRA108S			-0.6	-0.88	-		
	KRA109S			-1.5	-1.82	-		
Transition Frequency	KRA107S~109S	f <sub>T</sub> *	V <sub>O</sub> =-10V, I <sub>O</sub> =-5mA	-	200	-	MHz	
Input Current	KRA107S	I <sub>I</sub>	V <sub>I</sub> =-5V	-	-	-0.88	mA	
	KRA108S			-	-	-0.36		
	KRA109S			-	-	-0.16		
Switching Time	Rise Time	t <sub>r</sub>	V <sub>O</sub> =-5V, V <sub>IN</sub> =-5V R <sub>L</sub> =1kΩ	-	0.07	-	μS	
				-	0.20	-		
				-	0.38	-		
	Storage Time	t <sub>stg</sub>		-	1.1	-		
				-	1.3	-		
				-	0.7	-		
	Fall Time	t <sub>f</sub>		-	0.35	-		
				-	0.4	-		
				-	0.48	-		

Note : \*Characteristic of Transistor Only

# KRA107S ~ KRA109S



# KRA107S~KRA109S

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