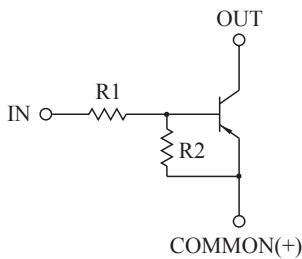


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

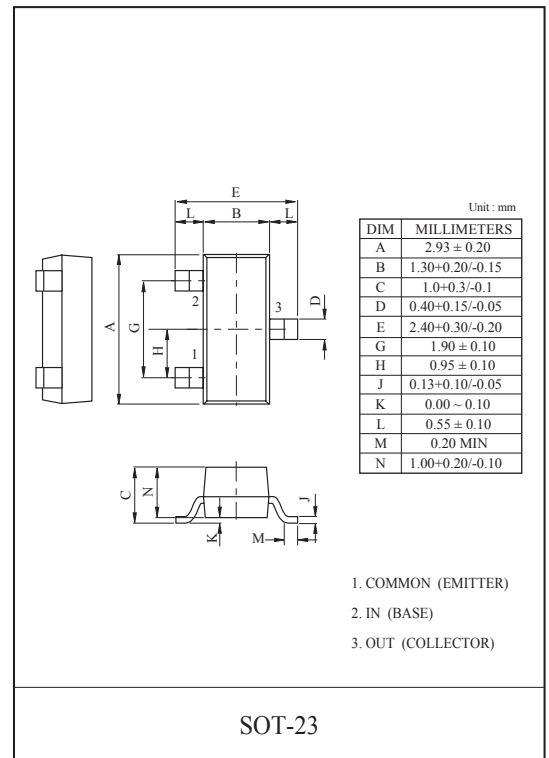
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- Suffix U : Qualified to AEC-Q101  
ex) KRA107S-RTK/HU

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

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



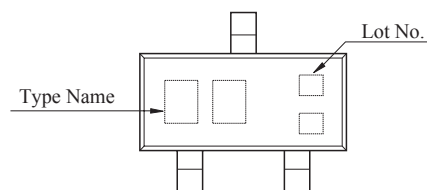
### MAXIMUM RATING (Ta=25°C)

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>	-55 ~ 150	°C
Storage Temperature Range		T <sub>stg</sub>	-55 ~ 150	°C

### MARK SPEC

TYPE	KRA107S	KRA108S	KRA109S
MARK	PH	PI	PJ

### Marking



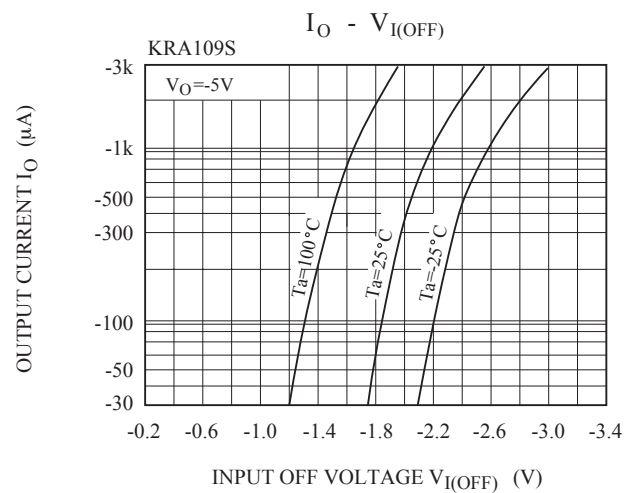
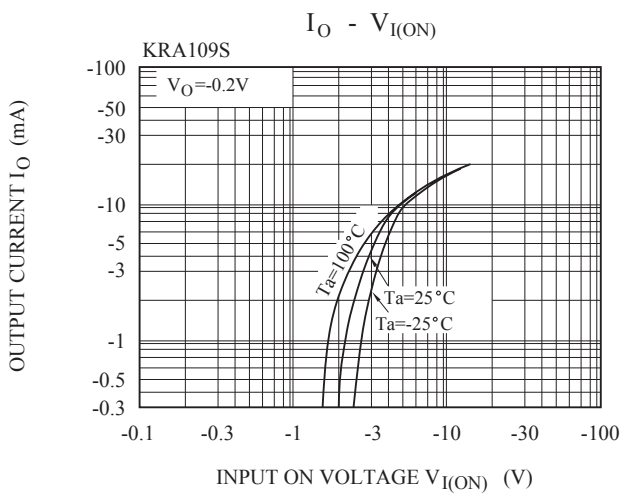
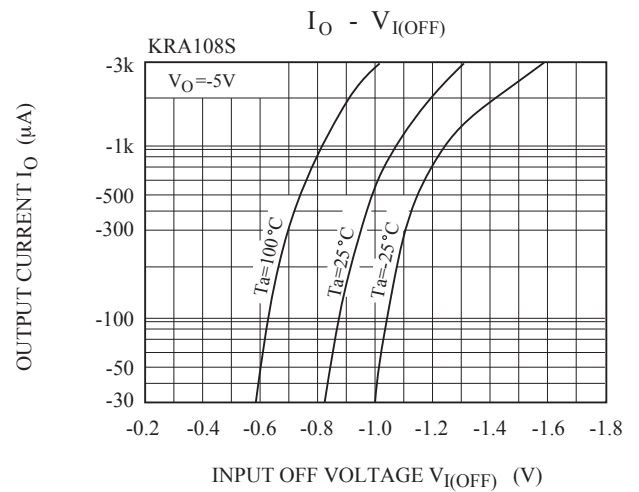
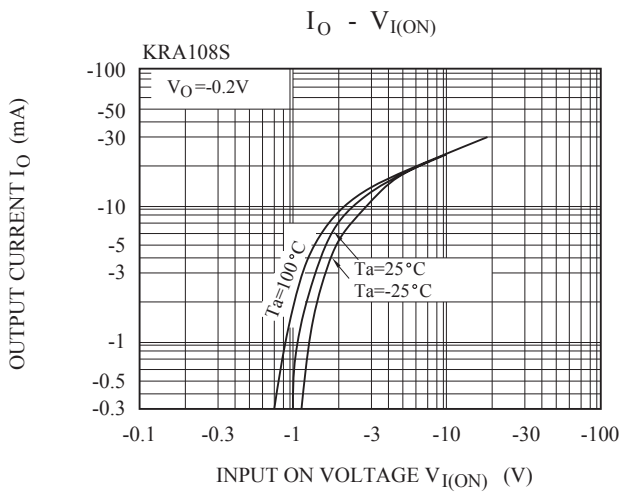
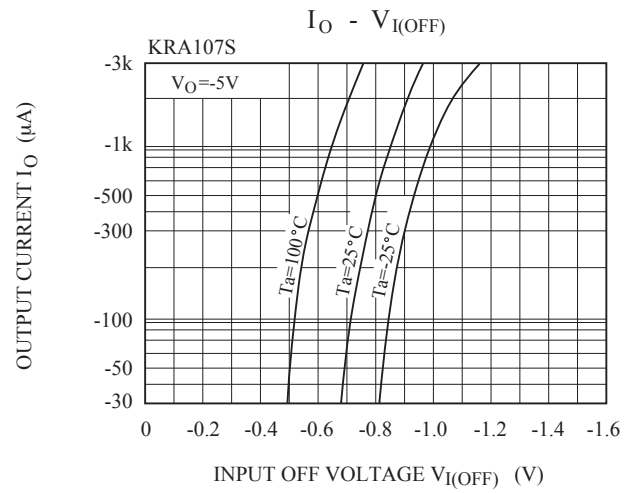
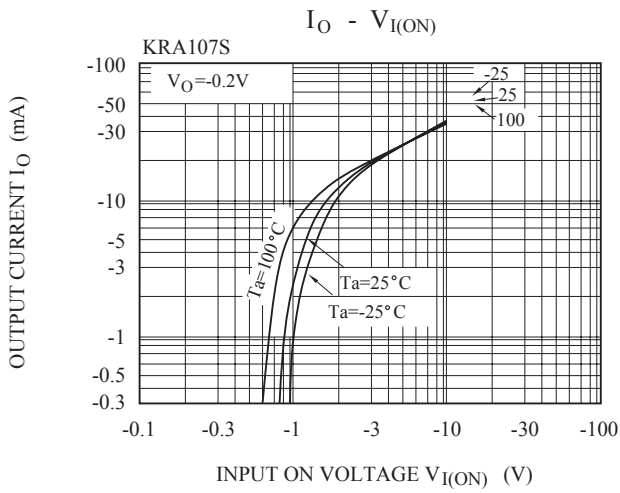
# KRA107S~KRA109S

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Cut-off Current		KRA107S ~ 109S	$I_{O(OFF)}$	$V_0=-50V, V_1=0$	-	-	-500	nA
DC Current Gain	KRA107S		$G_I$	$V_0=-5V, I_0=-10mA$	80	150	-	
	KRA108S				80	150	-	
	KRA109S				70	140	-	
Output Voltage		KRA107S ~ 109S	$V_{O(ON)}$	$I_0=-10mA, I_1=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	KRA107S		$V_{I(ON)}$	$V_0=-0.2V, I_0=-5mA$	-	-1.2	-1.8	V
	KRA108S				-	-1.8	-2.6	
	KRA109S				-	-3.0	-5.8	
Input Voltage (OFF)	KRA107S		$V_{I(OFF)}$	$V_0=-5V, I_0=-0.1mA$	-0.5	-0.75	-	V
	KRA108S				-0.6	-0.88	-	
	KRA109S				-1.5	-1.82	-	
Transition Frequency		KRA107S ~ 109S	$f_T^*$	$V_0=-10V, I_0=-5mA$	-	200	-	MHz
Input Current	KRA107S		$I_I$	$V_1=-5V$	-	-	-0.88	mA
	KRA108S				-	-	-0.36	
	KRA109S				-	-	-0.16	
Switching Time	Rise Time	KRA107S	$t_r$	$V_0=-5V, V_{IN}=-5V$ $R_L=1k\Omega$	-	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	-	
Input Resistor	KRA107S		R1	-	7	10	13	k $\Omega$
	KRA108S				15.4	22	28.6	
	KRA109S				32.9	47	61.1	
Resistor Ratio	KRA107S		R2/R1	-	3.7	4.7	5.7	
	KRA108S				1.7	2.1	2.6	
	KRA109S				0.37	0.47	0.57	

Note : \* Characteristic of Transistor Only.

# KRA107S~KRA109S



# KRA107S~KRA109S

