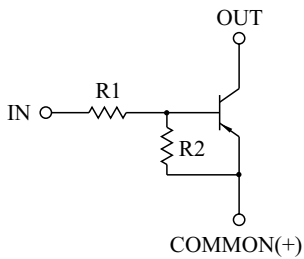


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

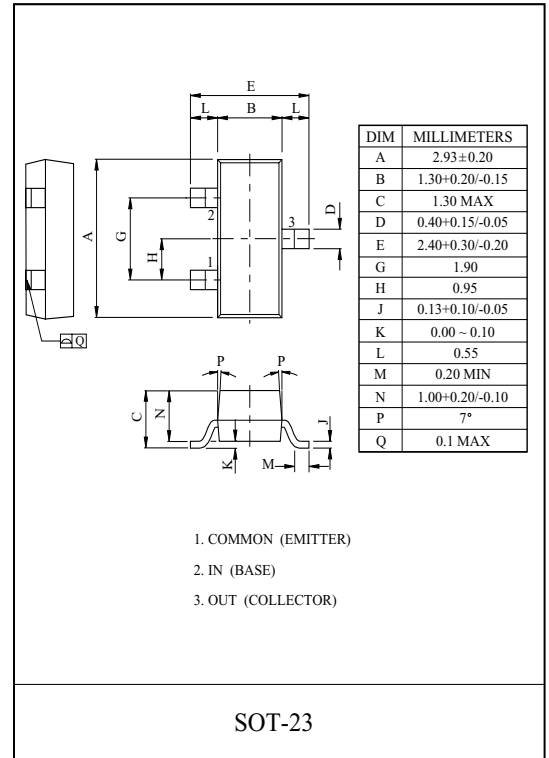
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(k)	R2(k)
KRA109S	47	22



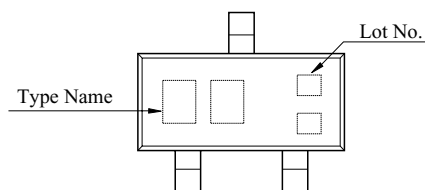
MAXIMUM RATING (Ta=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Output Voltage	V_O	-50	V
Input Voltage	V_I	-5	V
Output Current	I_O	10	mA
Power Dissipation	P_D	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

MARK SPEC

TYPE	KRA109S
MARK	PJ

Marking



KRA109S

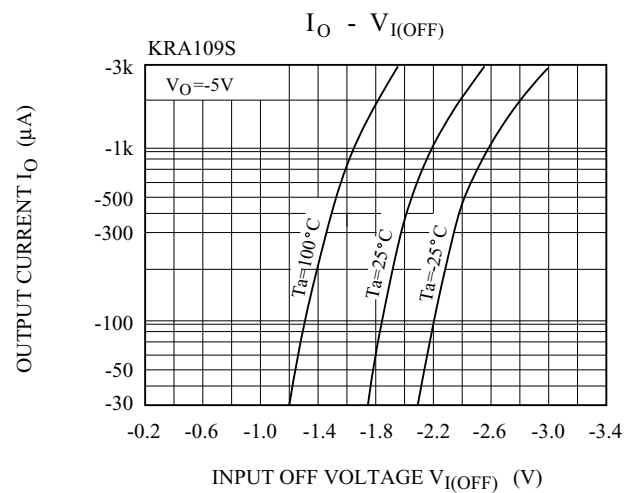
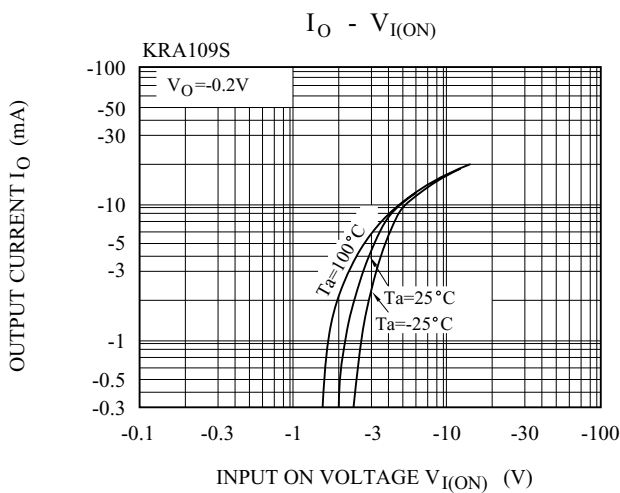
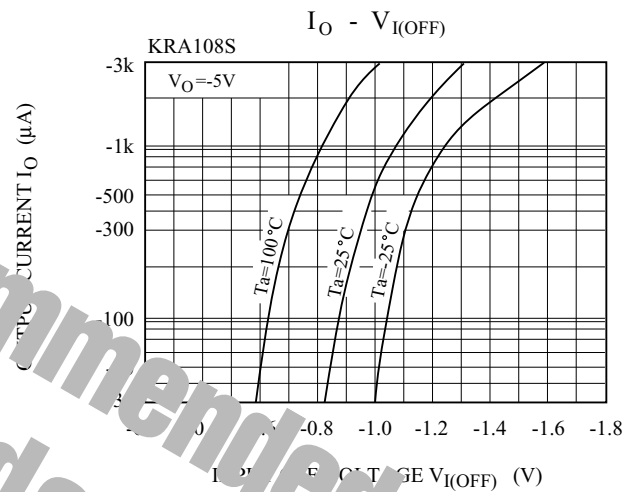
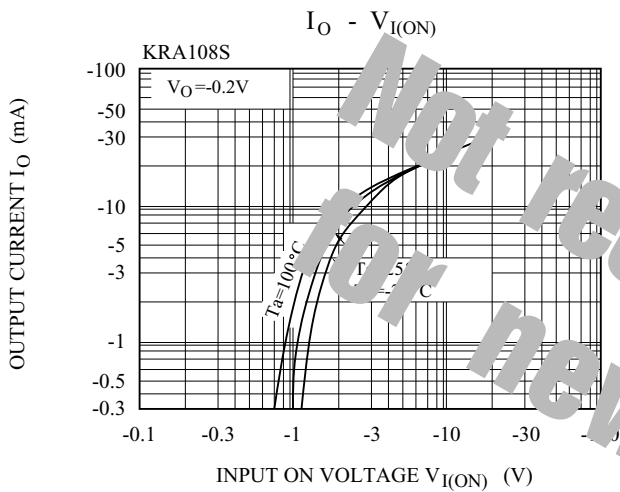
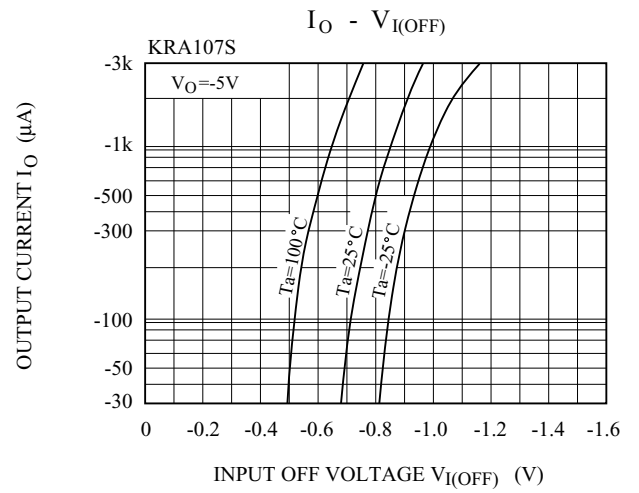
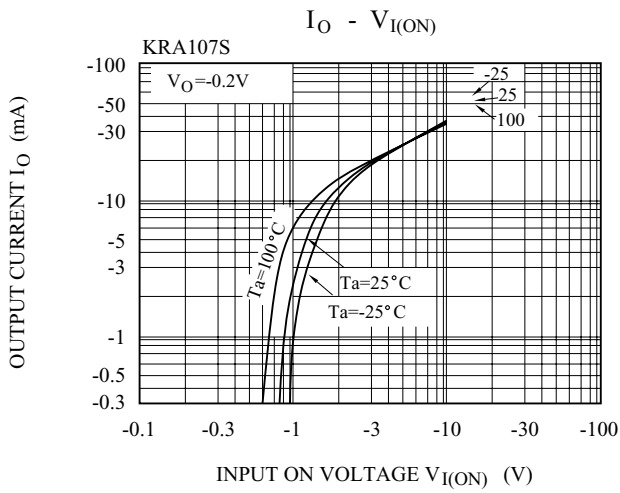
ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current		$I_{O(OFF)}$	$V_O=-50V, V_I=0$	-	-	-500	nA
DC Current Gain		G_I	$V_O=-5V, I_O=-10mA$	70	140	-	
Output Voltage		$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)		$V_{I(ON)}$	$V_O=-0.2V, I_O=-5mA$	-	-3.0	-5.8	V
Input Voltage (OFF)		$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-1.5	-1.82	-	V
Transition Frequency		f_T^*	$V_O=-10V, I_O=-5mA$	-	200	-	MHz
Input Current		I_I	$V_I=-5V$	-	-	-0.16	mA
Switching Time	Rise Time	t_r	$V_O=-5V, V_{IN}=-5V$ $R_L=1k$	-	0.38	-	μs
	Storage Time	t_{stg}		-	0.7	-	
	Fall Time	t_f		-	0.48	-	
Input Resistor		R1	-	32.9	47	61.1	k
Resistor Ratio		R2/R1	-	0.37	0.47	0.57	

Note : * Characteristic of Transistor Only.

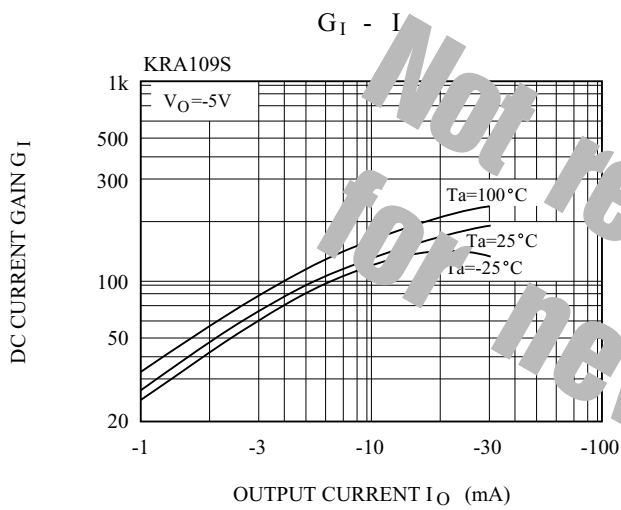
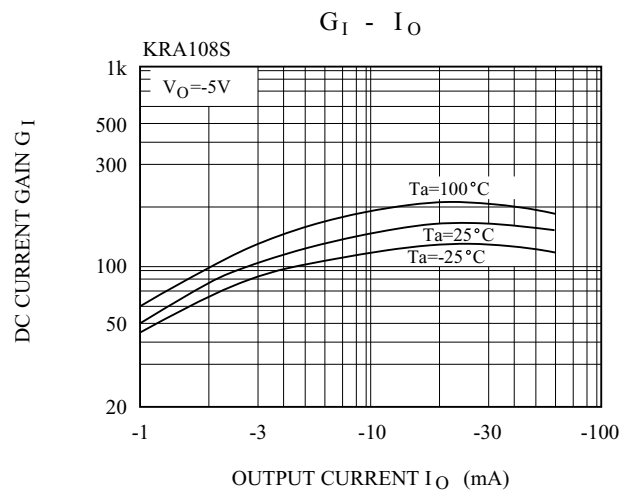
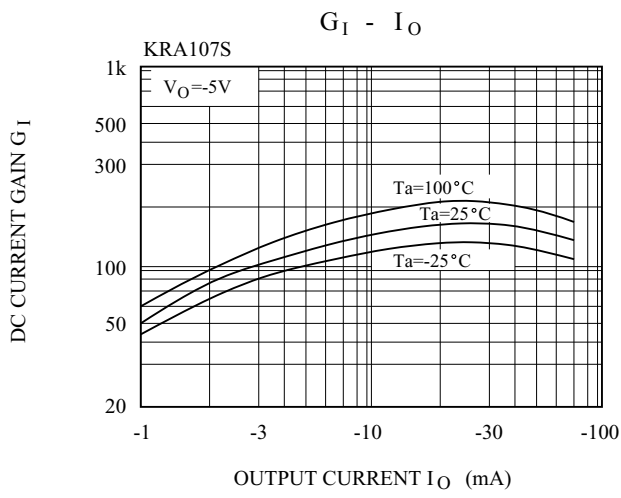
**Not recommended
for new design**

KRA109S



Not recommended for new design

KRA109S



Not recommended
for new design