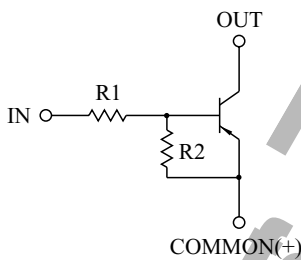


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

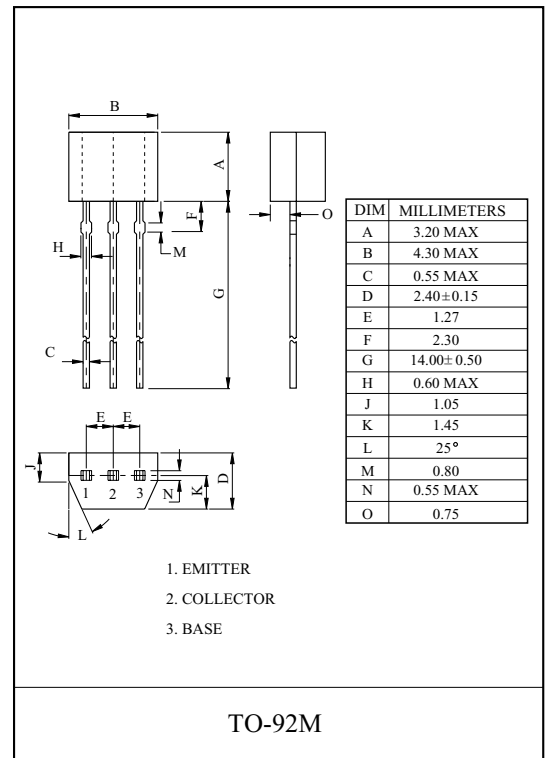
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(k)	R2(k)
KRA107M	10	47
KRA108M	22	47
KRA109M	47	22



MAXIMUM RATING (Ta=25)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA107M 109M	V_O	-50	V
Input Voltage	KRA107M	V_I	-30, 6	V
	KRA108M		-40, 7	
	KRA109M		-40, 15	
Output Current	KRA107M 109M	I_O	-100	mA
Power Dissipation		P_D	400	mW
Junction Temperature		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	

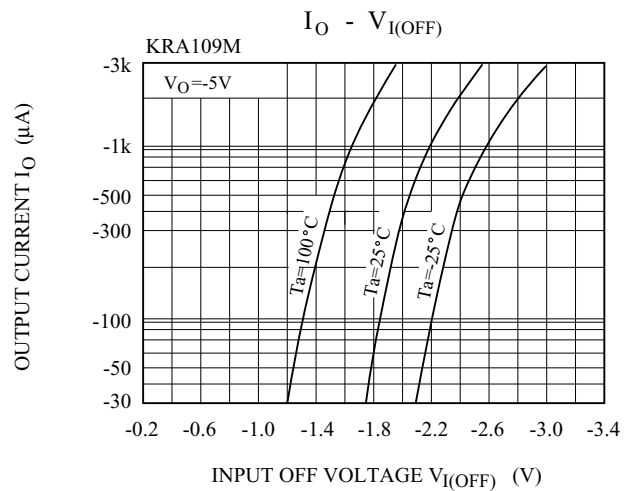
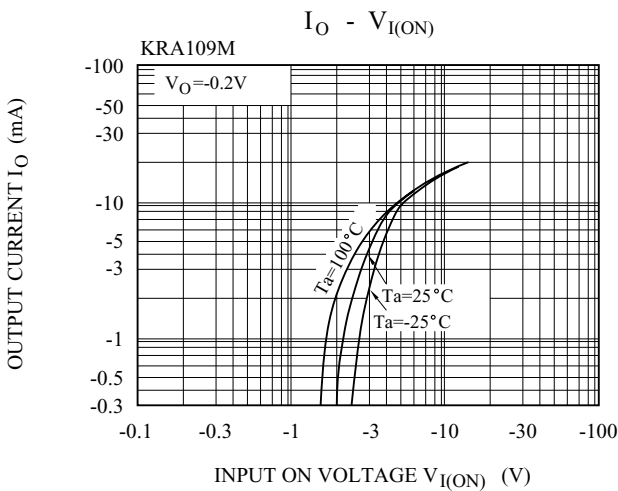
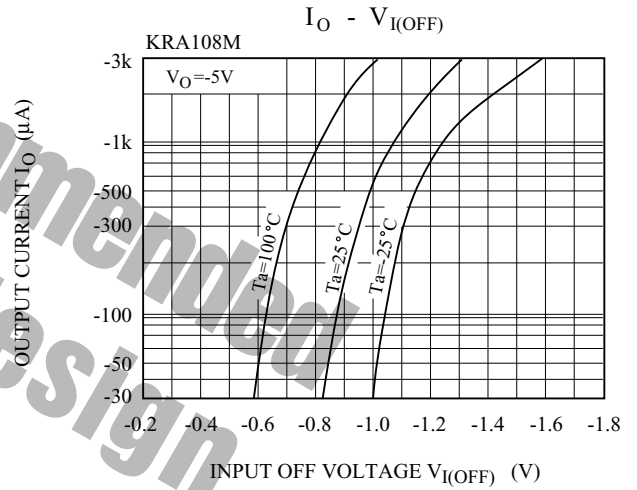
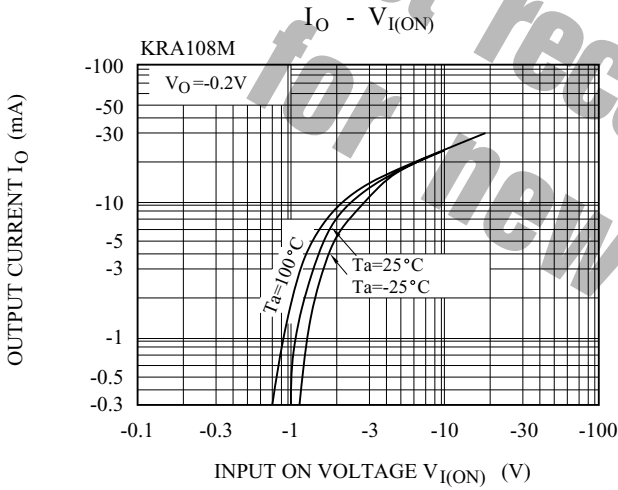
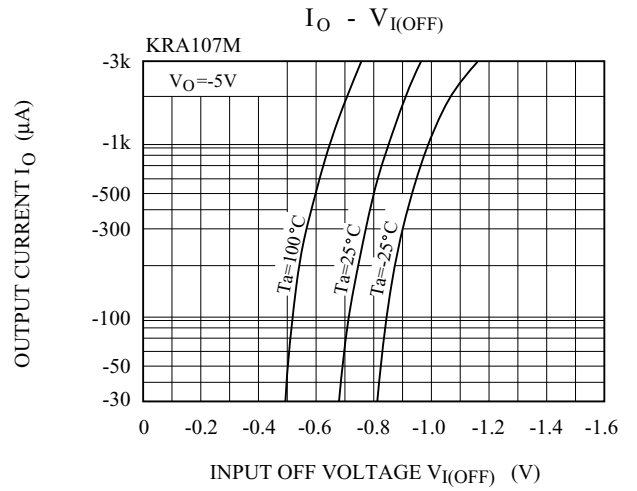
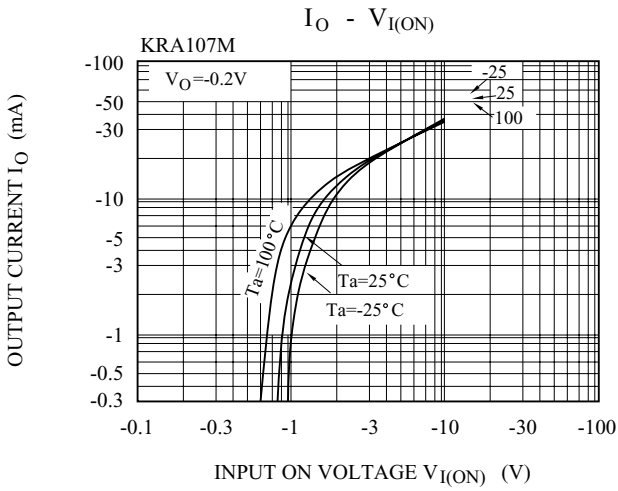
KRA107M~KRA109M

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

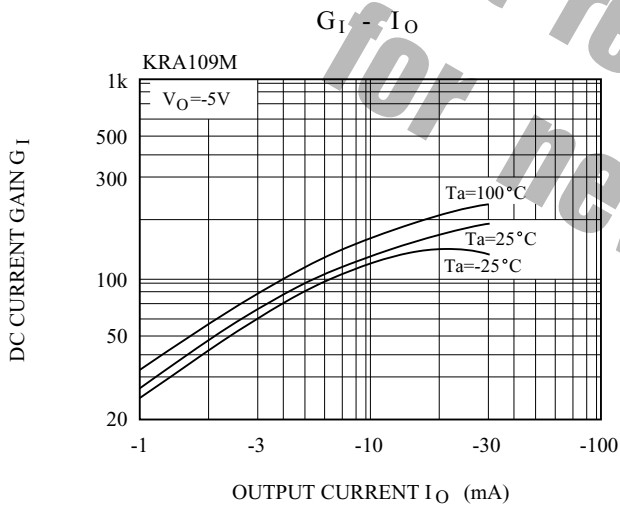
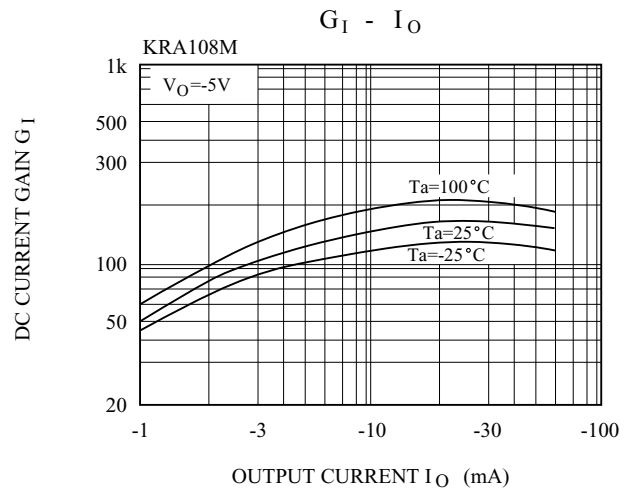
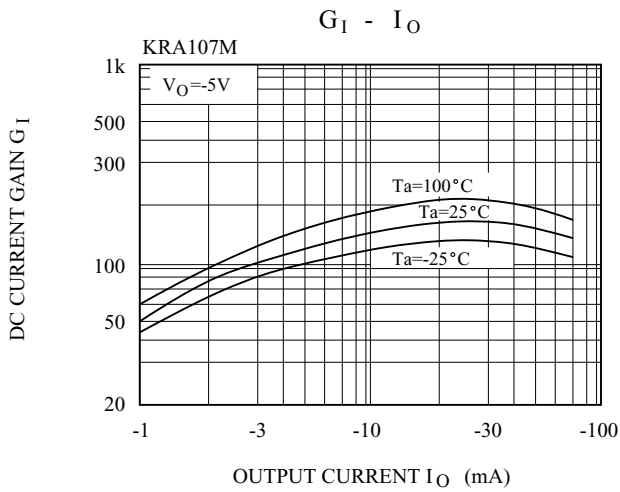
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Cut-off Current		KRA107M 109M	$I_{O(OFF)}$	$V_O=-50V, V_I=0$	-	-	-500	nA
DC Current Gain	KRA107M		G_I	$V_O=-5V, I_O=-10mA$	80	150	-	
	KRA108M				80	150	-	
	KRA109M				70	140	-	
Output Voltage		KRA107M 109M	$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	KRA107M		$V_{I(ON)}$	$V_O=-0.2V, I_O=-5mA$	-	-1.2	-1.8	V
	KRA108M				-	-1.8	-2.6	
	KRA109M				-	-3.0	-5.8	
Input Voltage (OFF)	KRA107M		$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-0.5	-0.75	-	V
	KRA108M				-0.6	-0.88	-	
	KRA109M				-1.5	-1.82	-	
Transition Frequency		KRA107M 109M	f_T^*	$V_O=-10V, I_O=-5mA$	-	200	-	MHz
Input Current	KRA107M		I_I	$V_I=-5V$	-	-	-0.88	mA
	KRA108M				-	-	-0.36	
	KRA109M				-	-	-0.16	
Switching Time	Rise Time	KRA107M	t_r	$V_O=-5V, V_{IN}=-5V$ $R_L=1k$	-	0.07	-	μs
		KRA108M			-	0.20	-	
		KRA109M			-	0.38	-	
	Storage Time	KRA107M	t_{stg}		-	1.1	-	
		KRA108M			-	0.3	-	
		KRA109M			-	0.7	-	
	Fall Time	KRA107M	t_f		-	0.35	-	
		KRA108M			-	0.4	-	
		KRA109M			-	0.48	-	
Input Resistor		KRA107M	R1	-	7	10	13	k
		KRA108M			15.4	22	28.6	
		KRA109M			32.9	47	61.1	
Resistor Ratio		KRA107M	R2/R1	-	3.7	4.7	5.7	
		KRA108M			1.7	2.1	2.6	
		KRA109M			0.37	0.47	0.57	

Note : * Characteristic of Transistor Only.

KRA107M~KRA109M



KRA107M~KRA109M



Not recommended for new design