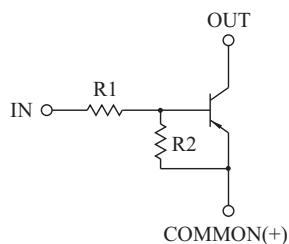


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

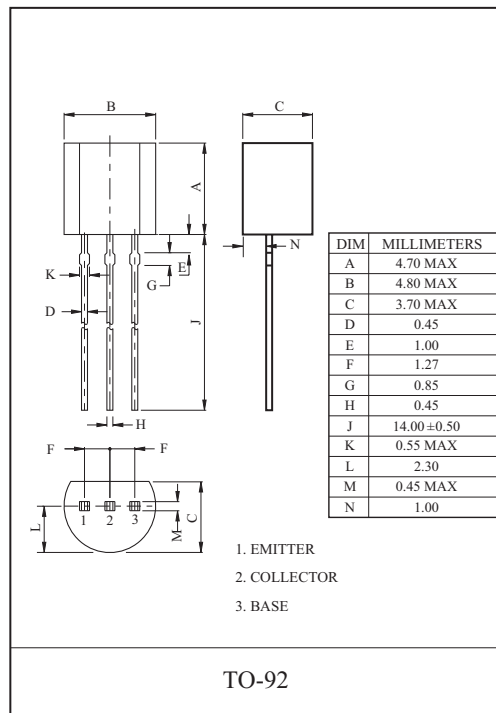
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRA101	4.7	4.7
KRA102	10	10
KRA103	22	22
KRA104	47	47
KRA105	2.2	47
KRA106	4.7	47



MAXIMUM RATING (Ta=25 $^{\circ}$ C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA101 106	V_O	-50	V
Input Voltage	KRA101	V_I	-20, 10	V
	KRA102		-30, 10	
	KRA103		-40, 10	
	KRA104		-40, 10	
	KRA105		-12, 5	
	KRA106		-20, 5	
Output Current	KRA101 106	I_O	-100	mA
Power Dissipation		P_D	625	mW
Junction Temperature		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	

KRA101~KRA106

ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRA101 106	$I_{O(OFF)}$	$V_0=-50V, V_I=0$	-	-	-500	nA
DC Current Gain	KRA101	G_I	$V_0=-5V, I_0=-10mA$	30	55	-	
	KRA102			50	80	-	
	KRA103			70	120	-	
	KRA104			80	200	-	
	KRA105			80	200	-	
	KRA106			80	200	-	
Output Voltage	KRA101 106	$V_{O(ON)}$	$I_0=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	KRA101	$V_{I(ON)}$	$V_0=-0.2V, I_0=-5mA$	-	-1.5	-2.0	V
	KRA102			-	-1.8	-2.4	
	KRA103			-	-2.1	-3.0	
	KRA104			-	-2.8	-5.0	
	KRA105			-	-0.8	-1.1	
	KRA106			-	-0.9	-1.3	
Input Voltage (OFF)	KRA101 104	$V_{I(OFF)}$	$V_0=-5V, I_0=-0.1mA$	-1.0	-1.2	-	V
	KRA105 106			-0.5	-0.65	-	
Transition Frequency	KRA101 106	f_T^*	$V_0=-10V, I_0=-5mA$	-	200	-	MHz
Input Current	KRA101	I_I	$V_I=-5V$	-	-	-1.8	mA
	KRA102			-	-	-0.88	
	KRA103			-	-	-0.36	
	KRA104			-	-	-0.18	
	KRA105			-	-	-3.6	
	KRA106			-	-	-1.8	
Input Resistor	KRA101	R1	-	3.29	4.7	6.11	k
	KRA102			7	10	13	
	KRA103			15.4	22	28.6	
	KRA104			32.9	47	61.1	
	KRA105			1.54	2.2	2.86	
	KRA106			3.29	4.7	6.11	
Resistor Ratio	KRA101~104	R2/R1	-	0.8	1.0	1.2	
	KRA105			17	21	26	
	KRA106			8	10	12	

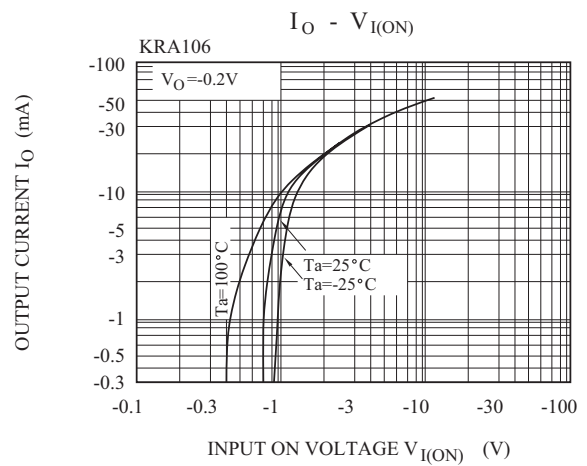
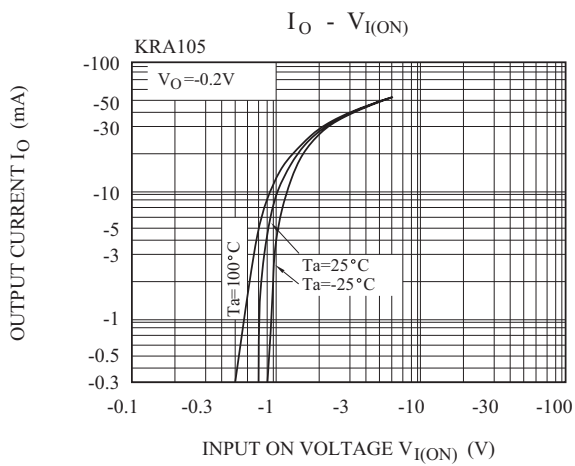
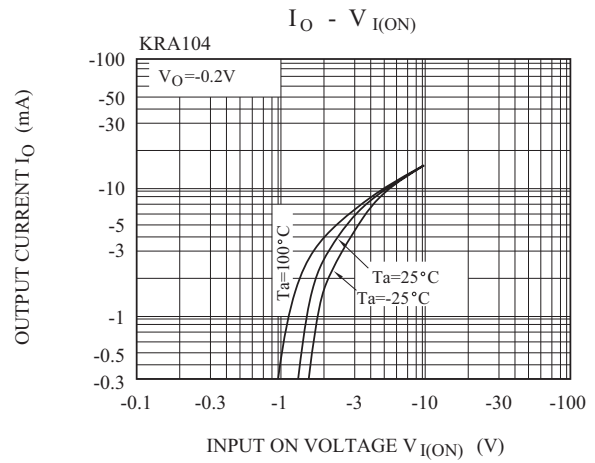
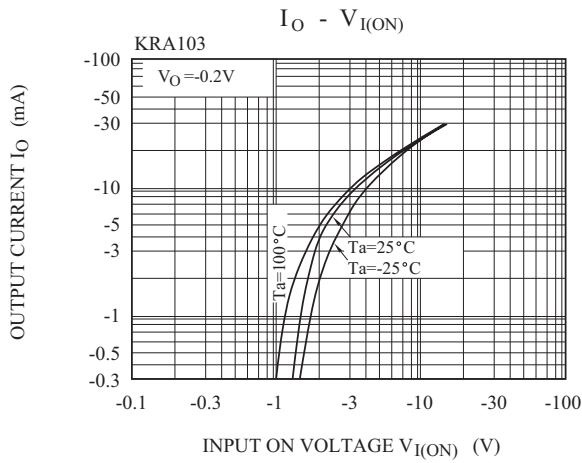
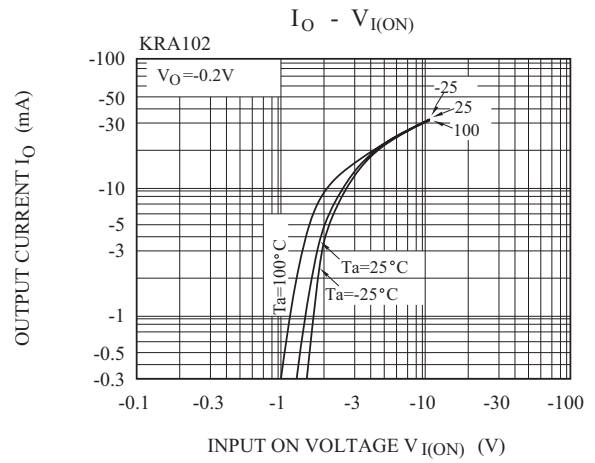
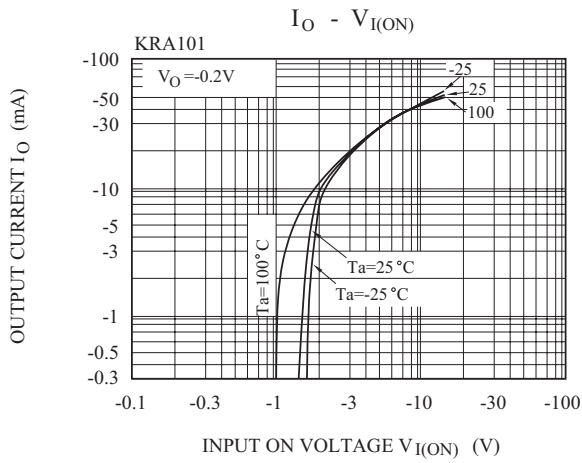
Note : *Characteristic of Transistor Only

KRA101~KRA106

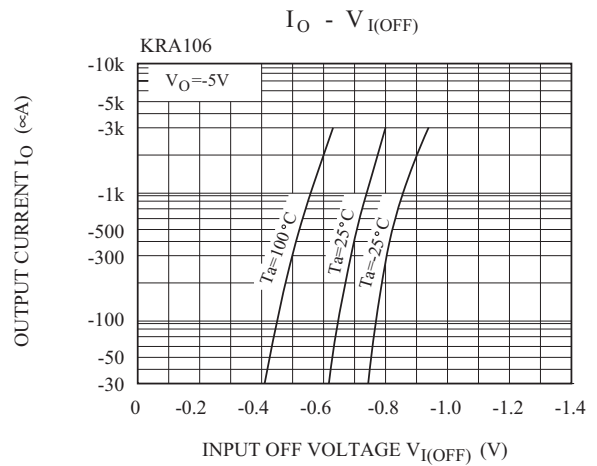
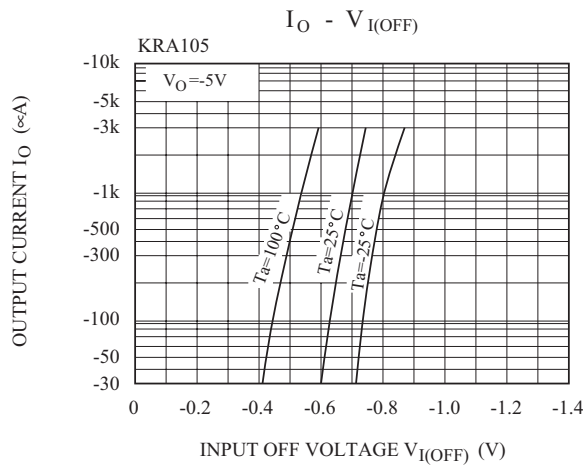
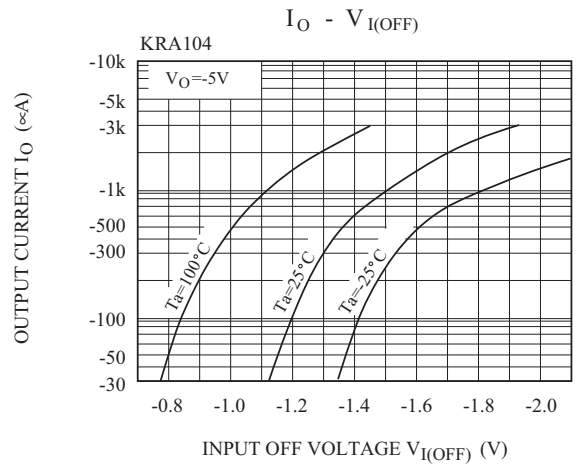
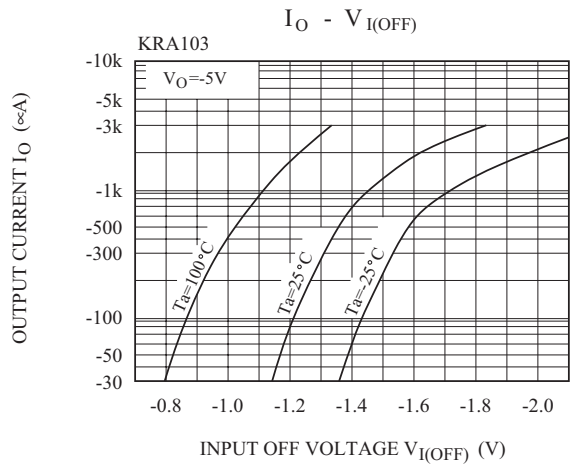
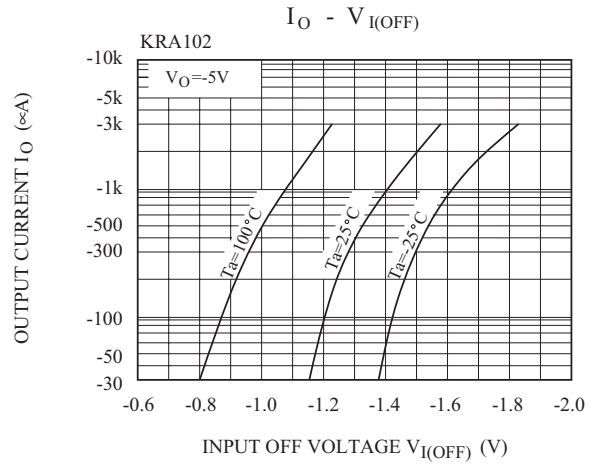
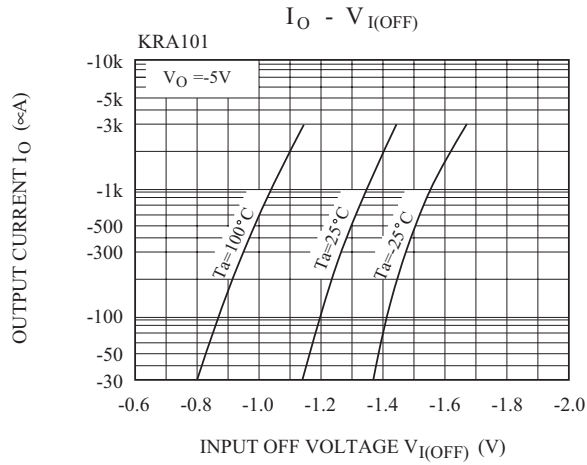
ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRA101	t_r	$V_O=-5V$ $V_{IN}=-5V$ $R_L=1k$	-	0.07	-	μs
		KRA102			-	0.06	-	
		KRA103			-	0.2	-	
		KRA104			-	0.24	-	
		KRA105			-	0.02	-	
		KRA106			-	0.07	-	
	Storage Time	KRA101	t_{stg}		-	1.1	-	
		KRA102			-	1.1	-	
		KRA103			-	1.1	-	
		KRA104			-	1.1	-	
		KRA105			-	1.1	-	
		KRA106			-	1.1	-	
	Fall Time	KRA101	t_f		-	0.15	-	
		KRA102			-	0.24	-	
		KRA103			-	0.38	-	
		KRA104			-	0.63	-	
		KRA105			-	0.1	-	
		KRA106			-	0.2	-	

KRA101~KRA106



KRA101~KRA106



KRA101~KRA106

