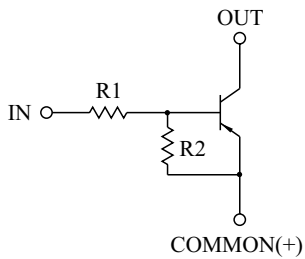


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

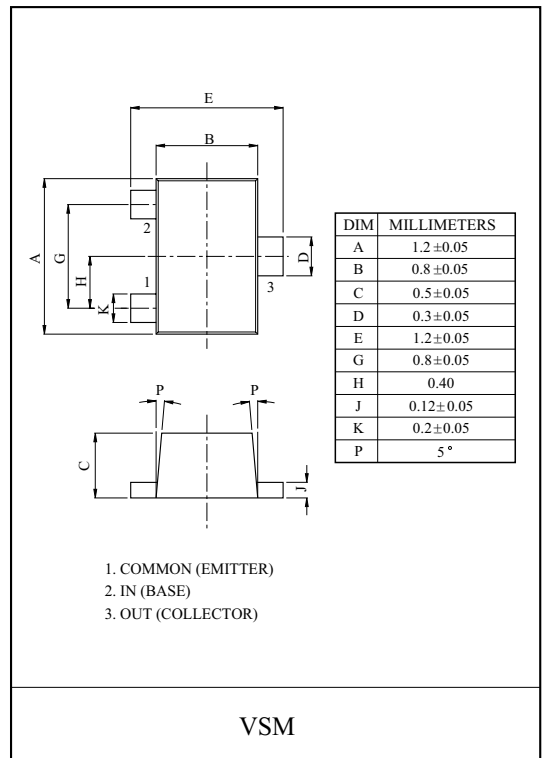
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRA301V	4.7	4.7
KRA302V	10	10
KRA303V	22	22
KRA304V	47	47
KRA305V	2.2	47
KRA306V	4.7	47



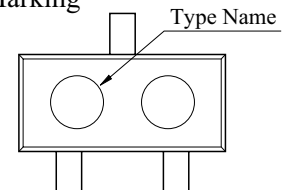
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA301V ~ 306V	V _O	-50	V
Input Voltage	KRA301V	V _I	-20, 10	V
	KRA302V		-30, 10	
	KRA303V		-40, 10	
	KRA304V		-40, 10	
	KRA305V		-12, 5	
	KRA306V		-20, 5	
Output Current	KRA301V ~ 306V	I _O	-100	mA
Power Dissipation		P _D	100	mW
Junction Temperature		T _j	150	℃
Storage Temperature Range		T _{stg}	-55 ~ 150	℃

MARK SPEC

TYPE	KRA301V	KRA302V	KRA303V	KRA304V	KRA305V	KRA306V
MARK	PA	PB	PC	PD	PE	PF

Marking



KRA301V~KRA306V

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRA301V ~306V	$I_{O(OFF)}$	$V_O=-50V, V_I=0$	-	-	-500	nA
DC Current Gain	KRA301V	G_I	$V_O=-5V, I_O=-10mA$	30	55	-	
	KRA302V			50	80	-	
	KRA303V			70	120	-	
	KRA304V			80	200	-	
	KRA305V			80	200	-	
	KRA306V			80	200	-	
Output Voltage	KRA301V ~306V	$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	KRA301V	$V_{I(ON)}$	$V_O=-0.2V, I_O=-5mA$	-	-1.5	-2.0	V
	KRA302V			-	-1.8	-2.4	
	KRA303V			-	-2.1	-3.0	
	KRA304V			-	-2.8	-5.0	
	KRA305V			-	-0.8	-1.1	
	KRA306V			-	-0.9	-1.3	
Input Voltage (OFF)	KRA301V ~304V	$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-1.0	-1.2	-	V
	KRA305V ~306V			-0.5	-0.65	-	
Transition Frequency	KRA301V ~306V	f_T^*	$V_O=-10V, I_O=-5mA$	-	200	-	MHz
Input Current	KRA301V	I_I	$V_I=-5V$	-	-	-1.8	mA
	KRA302V			-	-	-0.88	
	KRA303V			-	-	-0.36	
	KRA304V			-	-	-0.18	
	KRA305V			-	-	-3.6	
	KRA306V			-	-	-1.8	

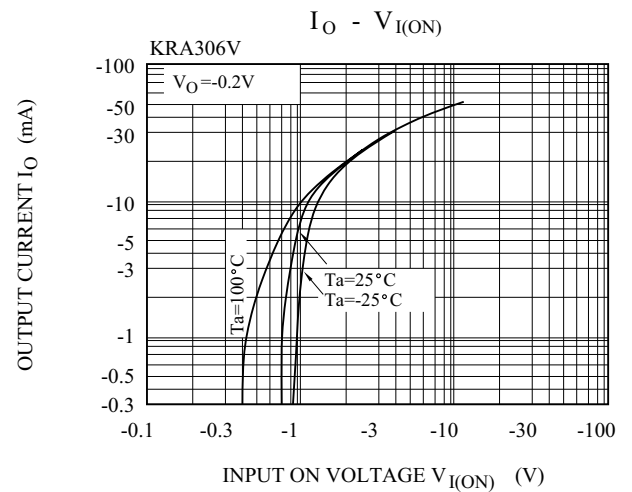
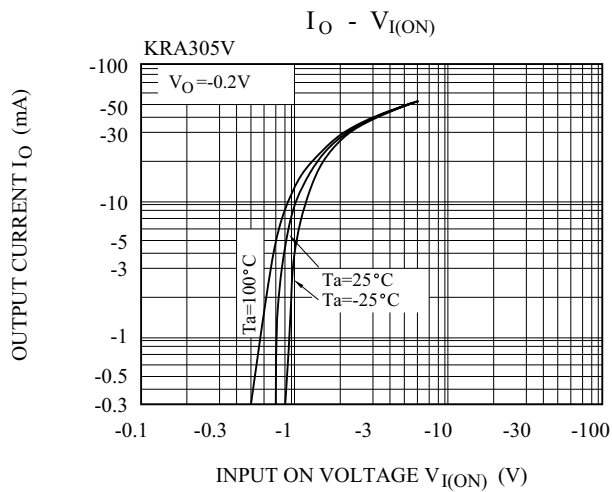
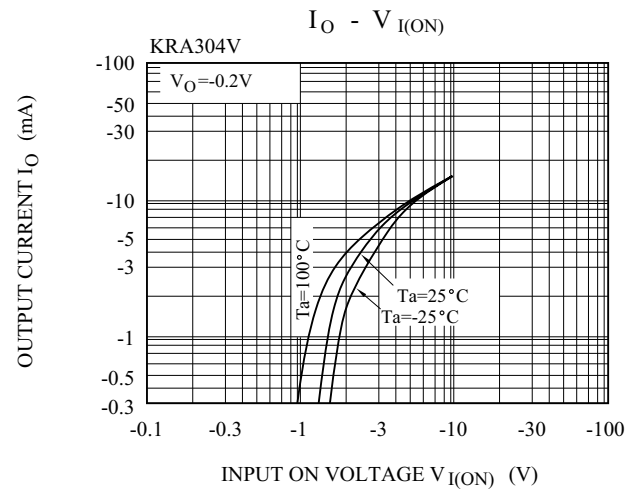
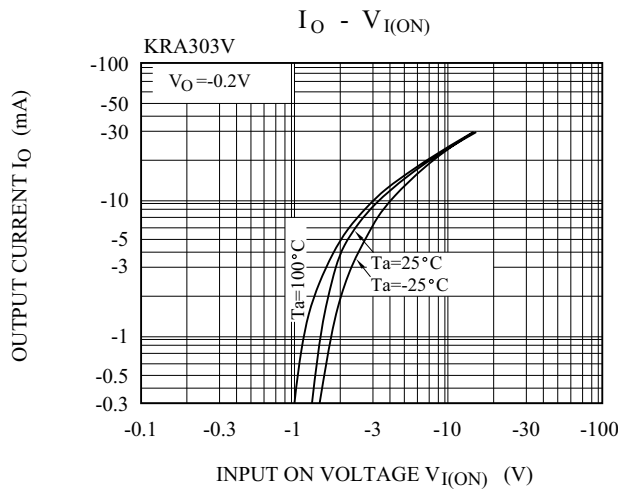
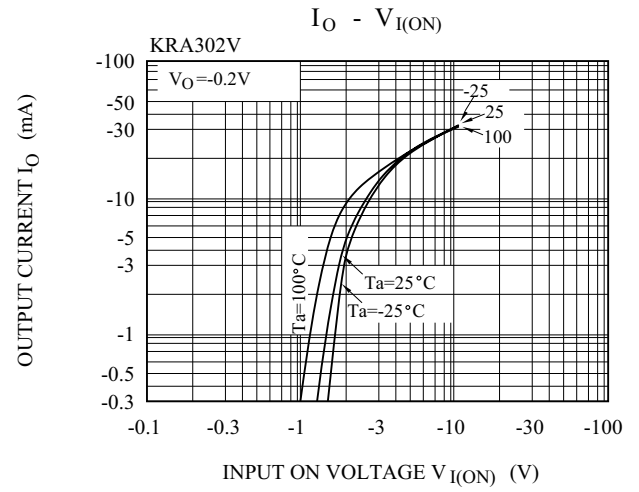
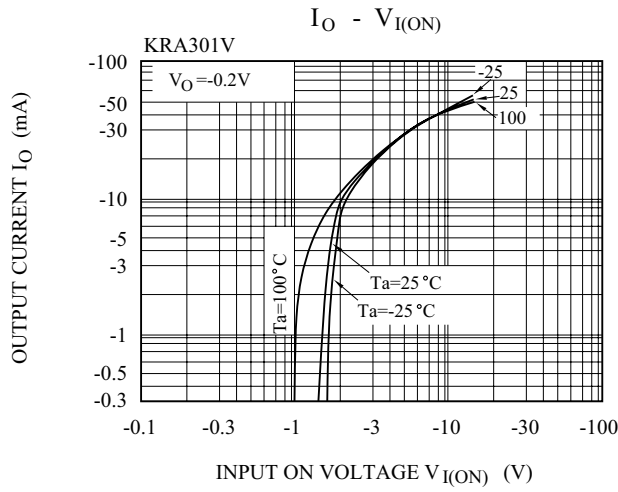
Note : * Characteristic of Transistor Only.

KRA301V~KRA306V

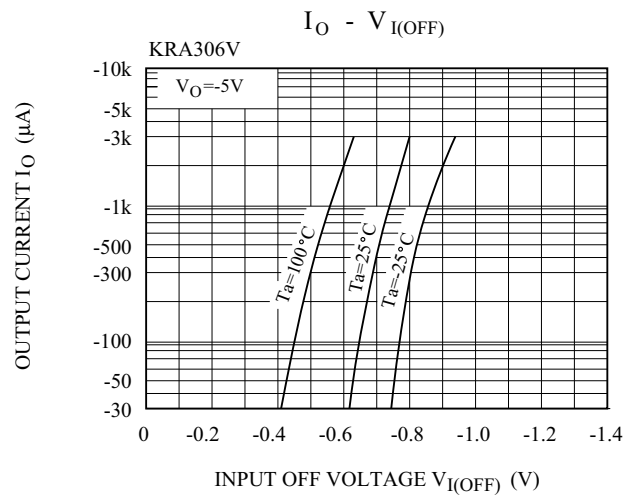
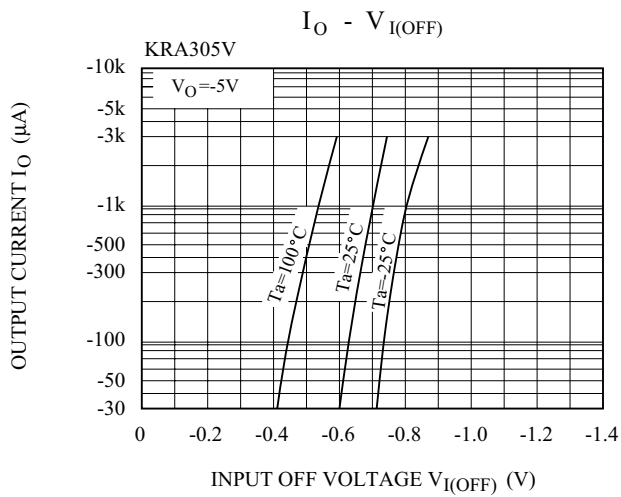
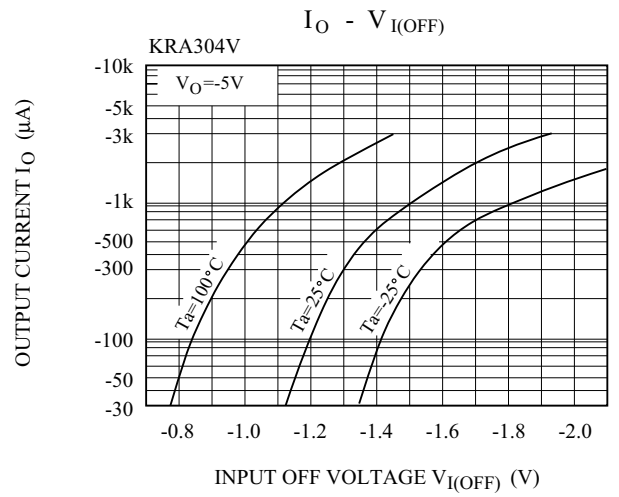
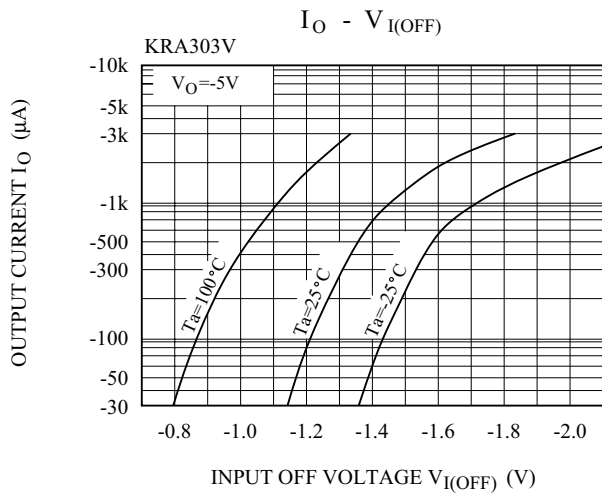
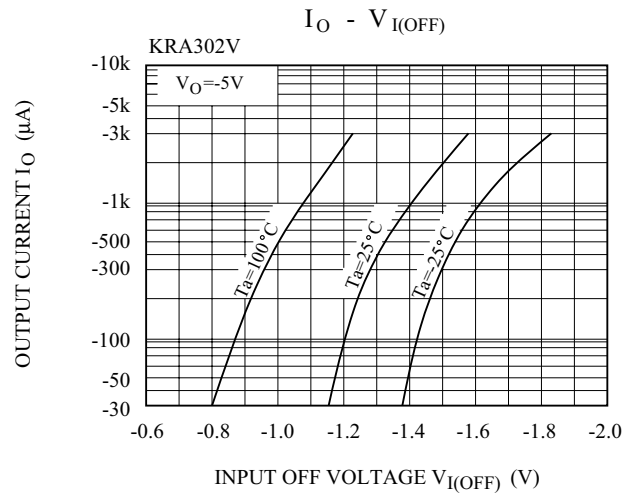
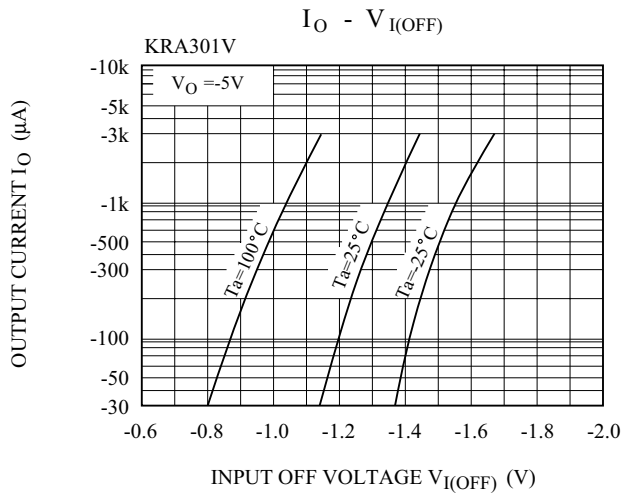
ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRA301V	t _r	V _O =-5V V _{IN} =-5V R _L =1kΩ	-	0.07	-	μS
		KRA302V			-	0.06	-	
		KRA303V			-	0.2	-	
		KRA304V			-	0.24	-	
		KRA305V			-	0.02	-	
		KRA306V			-	0.07	-	
	Storage Time	KRA301V	t _{stg}		-	1.1	-	
		KRA302V			-	1.1	-	
		KRA303V			-	1.1	-	
		KRA304V			-	1.1	-	
		KRA305V			-	1.1	-	
		KRA306V			-	1.1	-	
	Fall Time	KRA301V	t _f		-	0.15	-	
		KRA302V			-	0.24	-	
		KRA303V			-	0.38	-	
		KRA304V			-	0.63	-	
		KRA305V			-	0.1	-	
		KRA306V			-	0.2	-	

KRA301V~KRA306V



KRA301V~KRA306V



KRA301V~KRA306V

