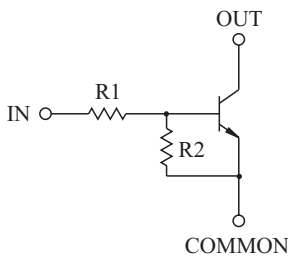


**SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.**

FEATURES

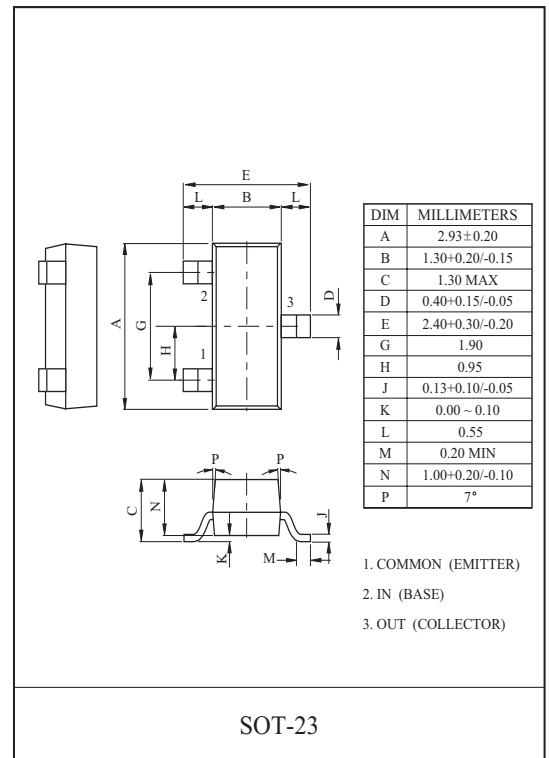
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- Suffix U : Qualified to AEC-Q101.
ex) KRC101S-RTK/HU

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC101S	4.7	4.7
KRC102S	10	10
KRC103S	22	22
KRC104S	47	47
KRC105S	2.2	47
KRC106S	4.7	47

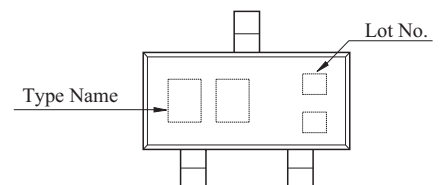


MAXIMUM RATING (Ta=25 $^{\circ}$ C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC101S ~ 106S	V_O	50	V
Input Voltage	KRC101S	V_I	20, -10	V
	KRC102S		30, -10	
	KRC103S		40, -10	
	KRC104S		40, -10	
	KRC105S		12, -5	
	KRC106S		20, -5	
Output Current	KRC101S ~ 106S	I_O	100	mA
Power Dissipation		P_D	200	mW
Junction Temperature		T_j	-55~150	
Storage Temperature Range		T_{stg}	-55~150	

TYPE	KRC101S	KRC102S	KRC103S	KRC104S	KRC105S	KRC106S
MARK	NA	NB	NC	ND	NE	NF

Marking



KRC101S~KRC106S

ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC101S 106S	$I_{O(OFF)}$	$V_0=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC101S	G_I	$V_0=5V, I_0=10mA$	30	55	-	
	KRC102S			50	80	-	
	KRC103S			70	120	-	
	KRC104S			80	200	-	
	KRC105S			80	200	-	
	KRC106S			80	200	-	
Output Voltage	KRC101S 106S	$V_{O(ON)}$	$I_0=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC101S	$V_{I(ON)}$	$V_0=0.2V, I_0=5mA$	-	1.5	2.0	V
	KRC102S			-	1.8	2.4	
	KRC103S			-	2.1	3.0	
	KRC104S			-	2.8	5.0	
	KRC105S			-	0.8	1.1	
	KRC106S			-	0.9	1.3	
Input Voltage (OFF)	KRC101S 104S	$V_{I(OFF)}$	$V_0=5V, I_0=0.1mA$	1.0	1.2	-	V
	KRC105S 106S			0.5	0.65	-	
Transition Frequency	KRC101S 106S	f_T^*	$V_0=10V, I_0=5mA$	-	200	-	MHz
Input Current	KRC101S	I_I	$V_I=5V$	-	-	1.8	mA
	KRC102S			-	-	0.88	
	KRC103S			-	-	0.36	
	KRC104S			-	-	0.18	
	KRC105S			-	-	3.6	
	KRC106S			-	-	1.8	
Input Resistor	KRC101S	R1	-	3.29	4.7	6.11	k
	KRC102S			7	10	13	
	KRC103S			15.4	22	28.6	
	KRC104S			32.9	47	61.1	
	KRC105S			1.54	2.2	2.86	
	KRC106S			3.29	4.7	6.11	
Resistor Ratio	KRC101S~104S	R2/R1	-	0.8	1.0	1.2	
	KRC105S			17	21	26	
	KRC106S			8	10	12	

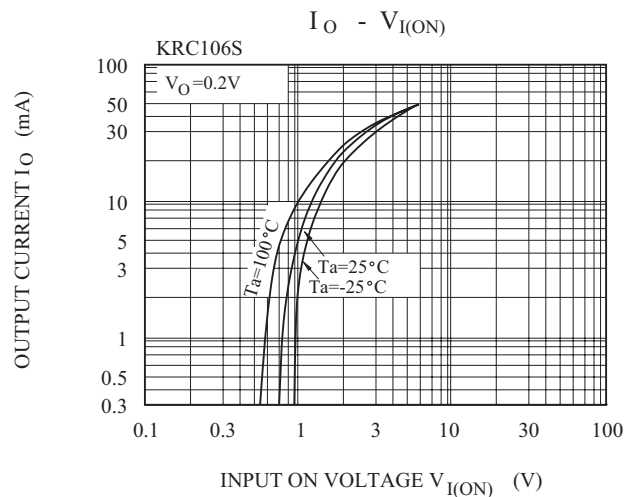
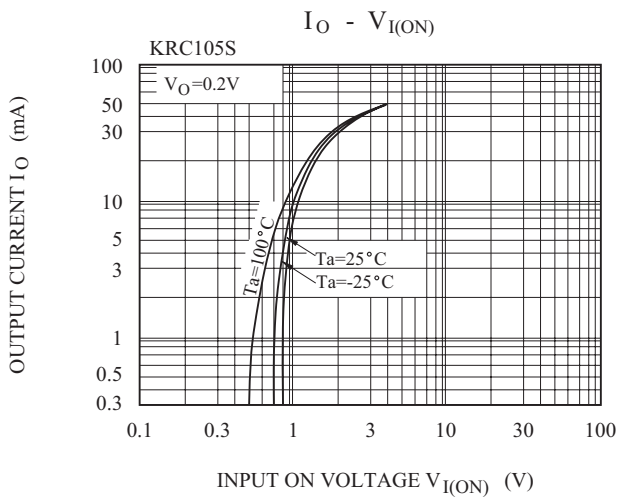
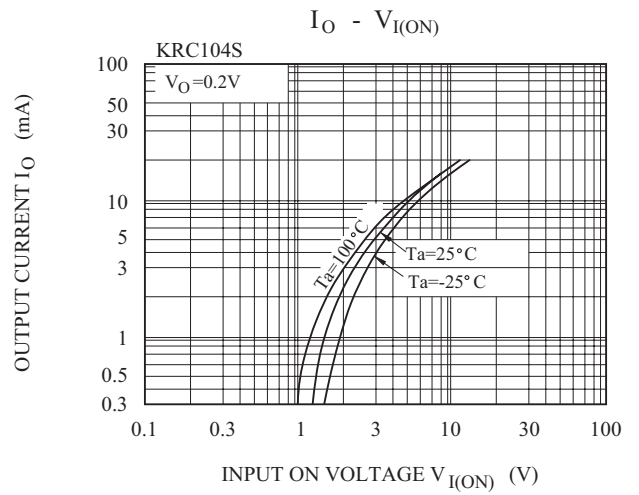
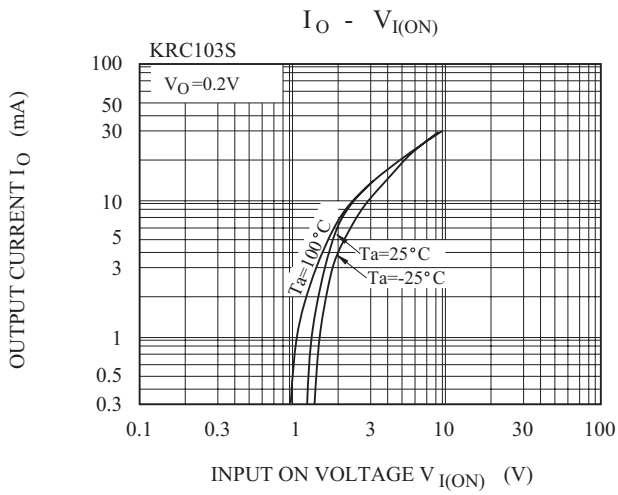
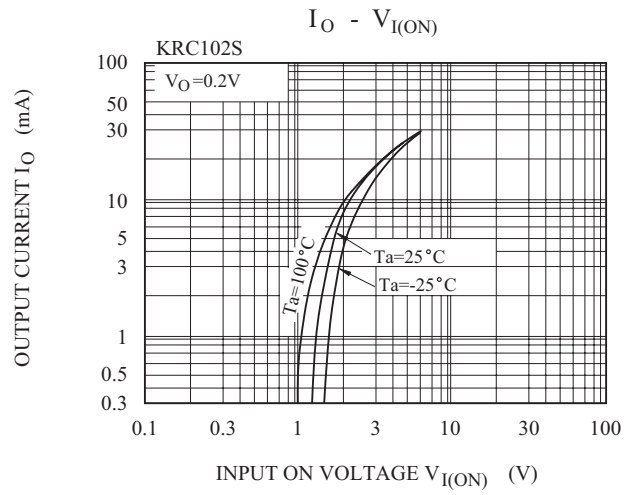
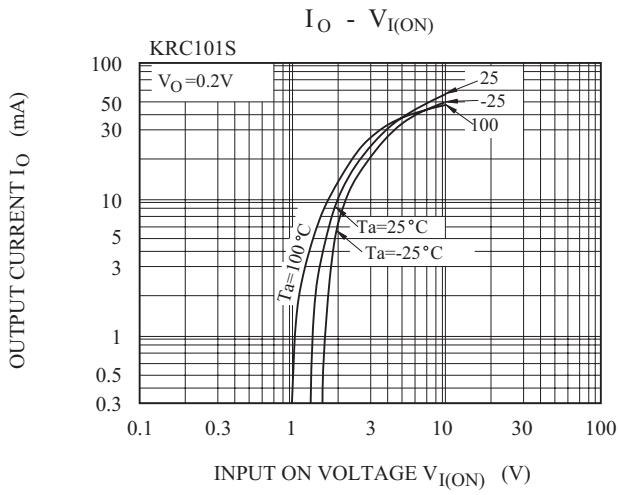
Note : * Characteristic of Transistor Only.

KRC101S~KRC106S

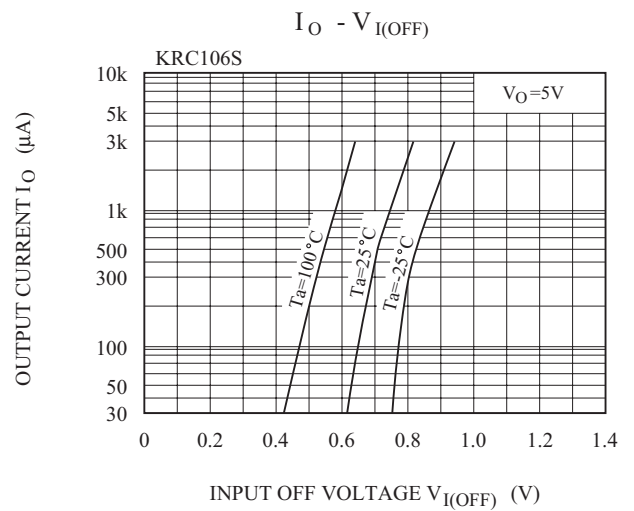
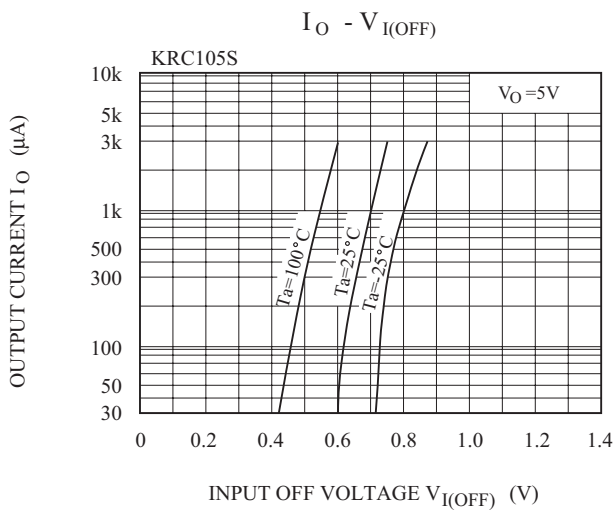
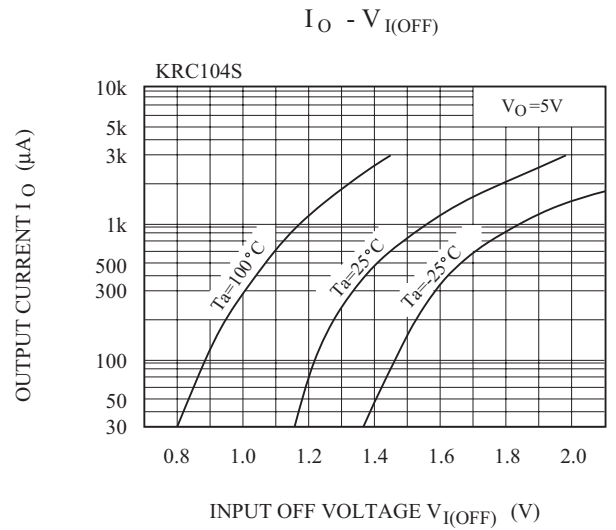
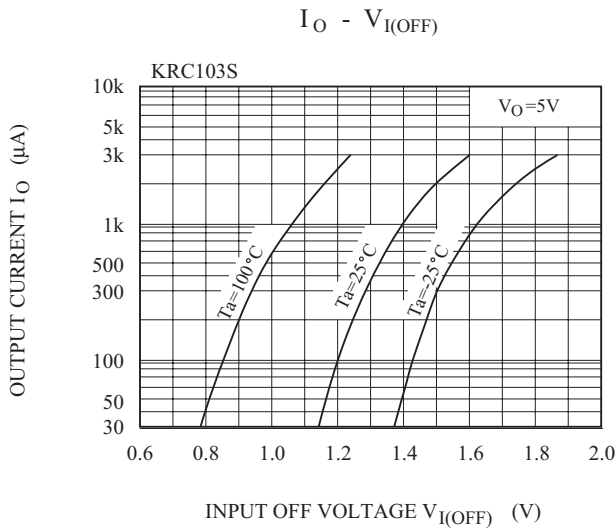
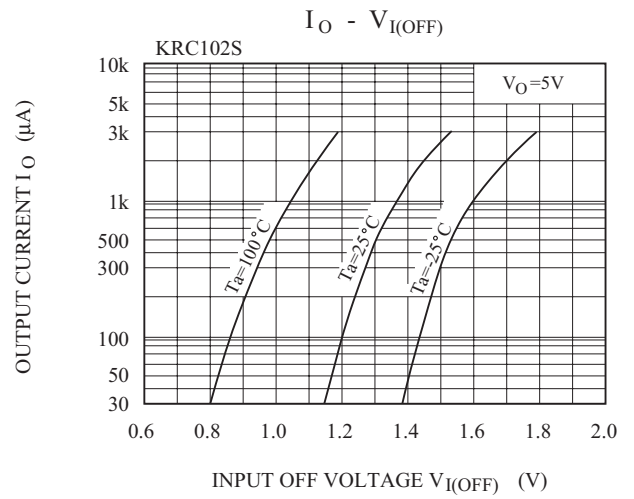
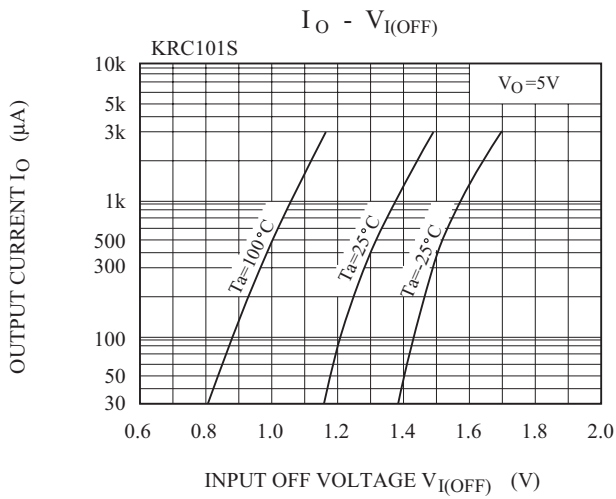
ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC101S	V _O =5V V _{IN} =5V R _L =1k	-	0.03	-	μS
		KRC102S		-	0.05	-	
		KRC103S		-	0.12	-	
		KRC104S		-	0.22	-	
		KRC105S		-	0.01	-	
		KRC106S		-	0.03	-	
	Storage Time	KRC101S		-	2.0	-	
		KRC102S		-	2.0	-	
		KRC103S		-	2.0	-	
		KRC104S		-	2.0	-	
		KRC105S		-	2.0	-	
		KRC106S		-	2.0	-	
	Fall Time	KRC101S		-	0.12	-	
		KRC102S		-	0.36	-	
		KRC103S		-	0.35	-	
		KRC104S		-	0.6	-	
		KRC105S		-	0.1	-	
		KRC106S		-	0.19	-	

KRC101S~KRC106S



KRC101S~KRC106S



KRC101S~KRC106S

