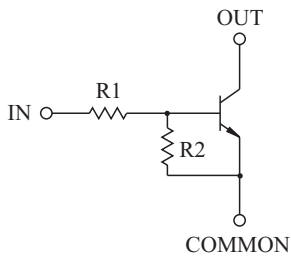


**SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.**

FEATURES

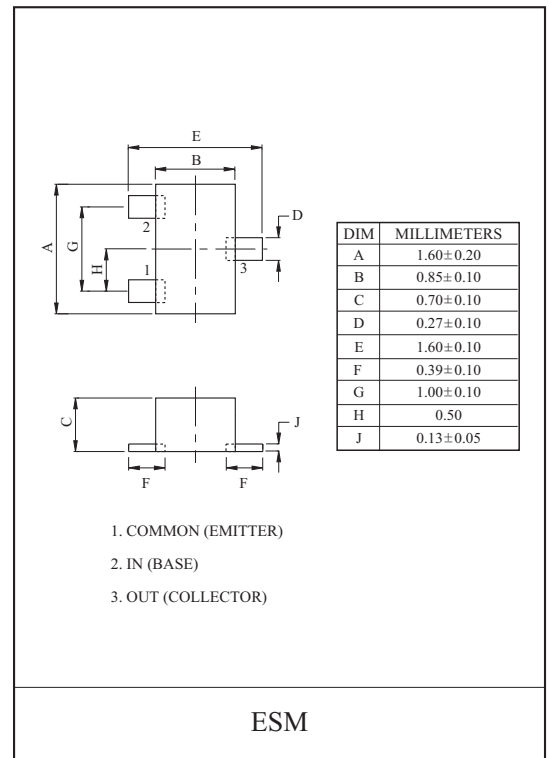
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.
- Suffix U : Qualified to AEC-Q101.
ex) KRC401E-RTK/HU

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC401E	4.7	4.7
KRC402E	10	10
KRC403E	22	22
KRC404E	47	47
KRC405E	2.2	47
KRC406E	4.7	47



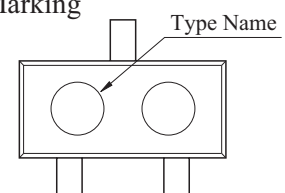
MAXIMUM RATING (Ta=25 $^{\circ}$ C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC401E 406E	V_O	50	V
Input Voltage	KRC401E	V_I	20, -10	V
	KRC402E		30, -10	
	KRC403E		40, -10	
	KRC404E		40, -10	
	KRC405E		12, -5	
	KRC406E		20, -5	
Output Current	KRC401E 406E	I_O	100	mA
Power Dissipation		P_D	100	mW
Junction Temperature		T_j	-55~150	
Storage Temperature Range		T_{stg}	-55~150	

MARK SPEC

TYPE	KRC401E	KRC402E	KRC403E	KRC404E	KRC405E	KRC406E
MARK	NA	NB	NC	ND	NE	NF

Marking



KRC401E~KRC406E

ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC401E 406E	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC401E	G_I	$V_O=5V, I_O=10mA$	30	55	-	
	KRC402E			50	80	-	
	KRC403E			70	120	-	
	KRC404E			80	200	-	
	KRC405E			80	200	-	
	KRC406E			80	200	-	
Output Voltage	KRC401E 406E	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC401E	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.5	2.0	V
	KRC402E			-	1.8	2.4	
	KRC403E			-	2.1	3.0	
	KRC404E			-	2.8	5.0	
	KRC405E			-	0.8	1.1	
	KRC406E			-	0.9	1.3	
Input Voltage (OFF)	KRC401E 404E	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	1.0	1.2	-	V
	KRC405E 406E			0.5	0.65	-	
Transition Frequency	KRC401E 406E	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	KRC401E	I_I	$V_I=5V$	-	-	1.8	mA
	KRC402E			-	-	0.88	
	KRC403E			-	-	0.36	
	KRC404E			-	-	0.18	
	KRC405E			-	-	3.6	
	KRC406E			-	-	1.8	
Input Resistor	KRC401E	R1	-	3.29	4.7	6.11	k
	KRC402E			7	10	13	
	KRC403E			15.4	22	28.6	
	KRC404E			32.9	47	61.1	
	KRC405E			1.54	2.2	2.86	
	KRC406E			3.29	4.7	6.11	
Resistor Ratio	KRC401E 404E	R2/R1	-	0.8	1.0	1.2	
	KRC405E			17	21	26	
	KRC406E			8	10	12	

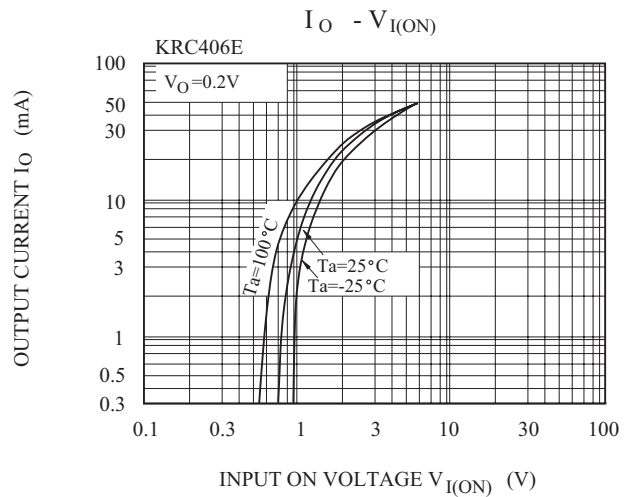
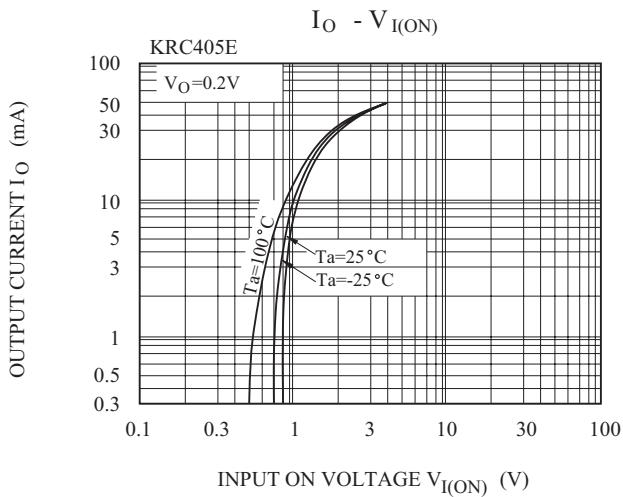
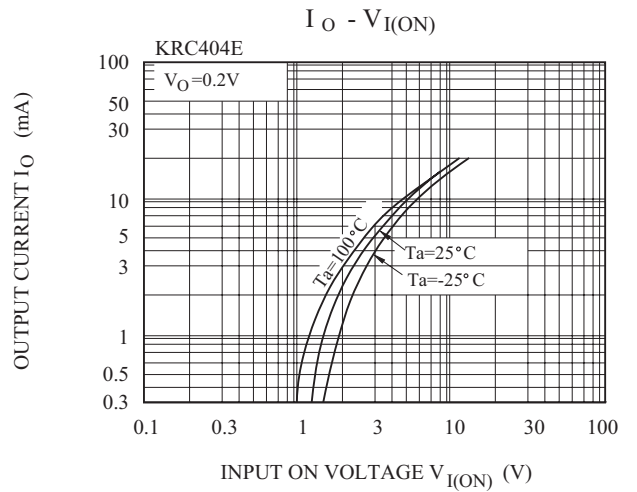
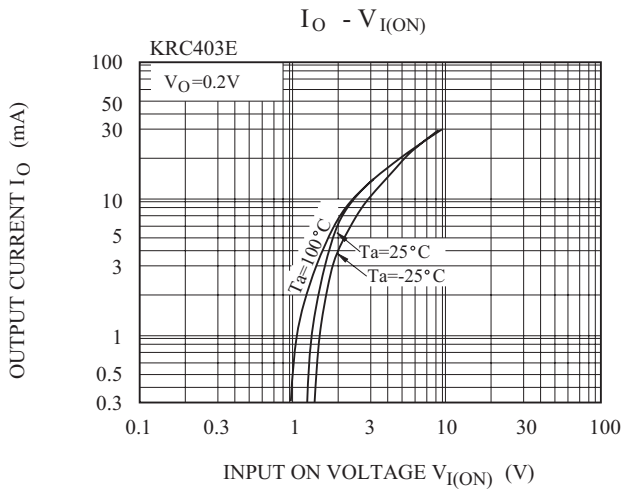
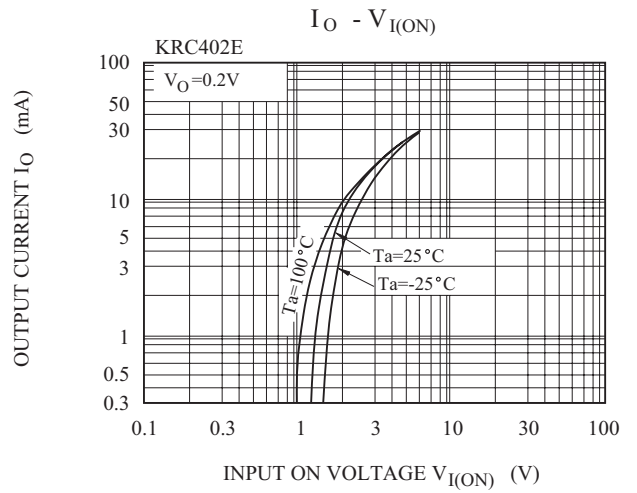
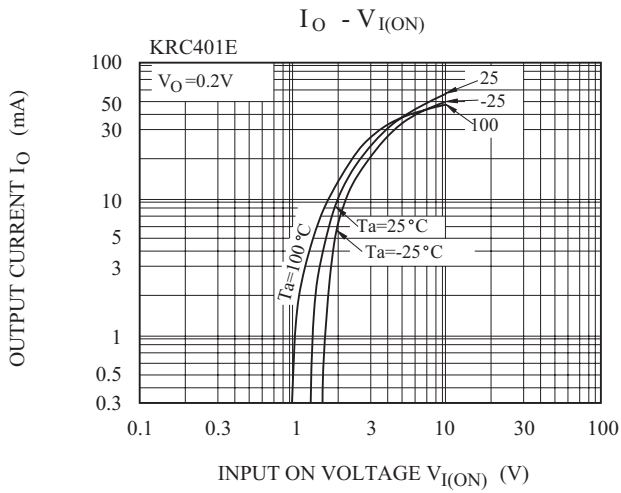
Note : * Characteristic of Transistor Only.

KRC401E~KRC406E

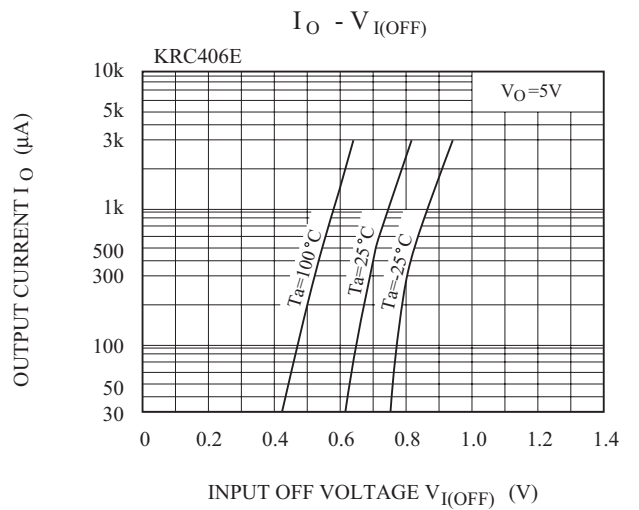
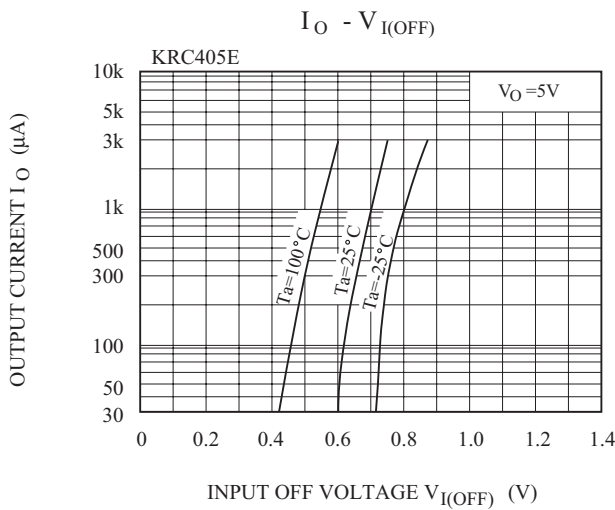
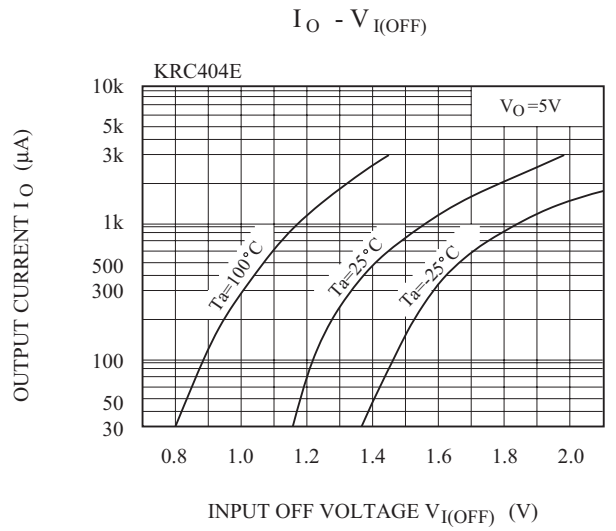
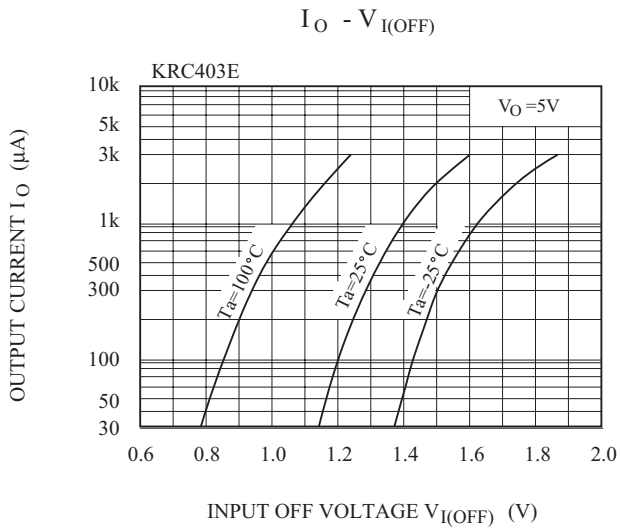
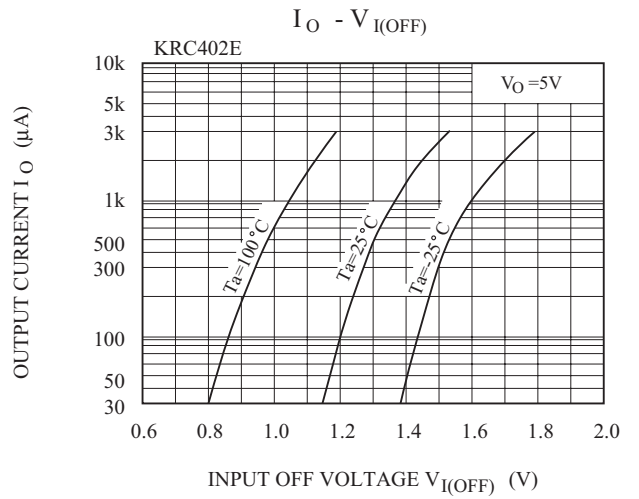
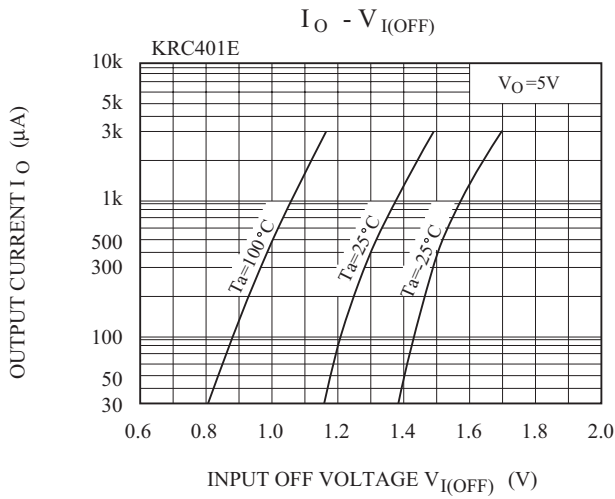
ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC401E	V _O =5V V _{IN} =5V R _L =1k	-	0.03	-	μS
		KRC402E		-	0.05	-	
		KRC403E		-	0.12	-	
		KRC404E		-	0.22	-	
		KRC405E		-	0.01	-	
		KRC406E		-	0.03	-	
	Storage Time	KRC401E		-	2.0	-	
		KRC402E		-	2.0	-	
		KRC403E		-	2.0	-	
		KRC404E		-	2.0	-	
		KRC405E		-	2.0	-	
		KRC406E		-	2.0	-	
	Fall Time	KRC401E		-	0.12	-	
		KRC402E		-	0.36	-	
		KRC403E		-	0.35	-	
		KRC404E		-	0.6	-	
		KRC405E		-	0.1	-	
		KRC406E		-	0.19	-	

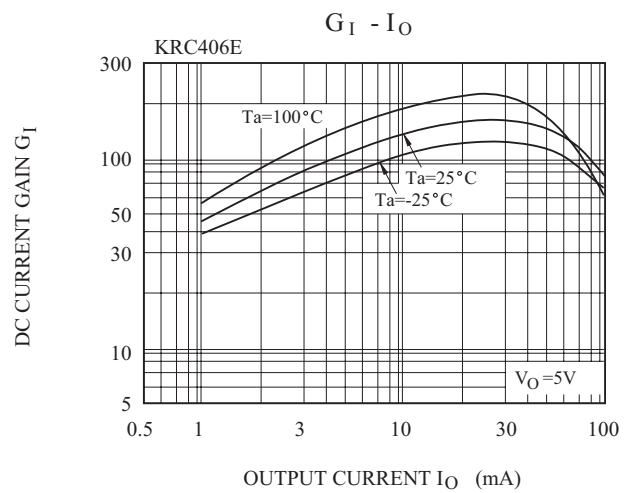
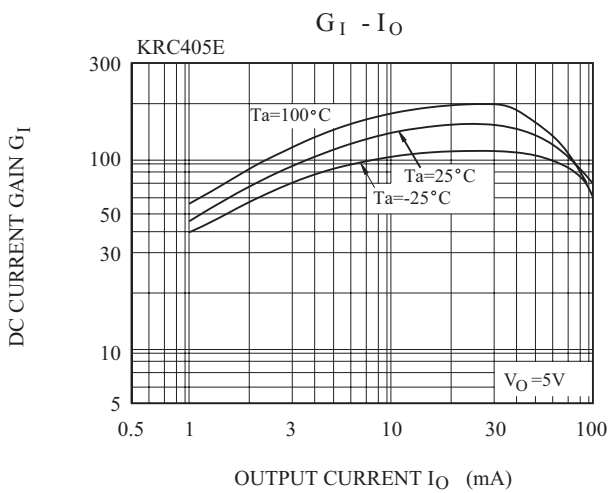
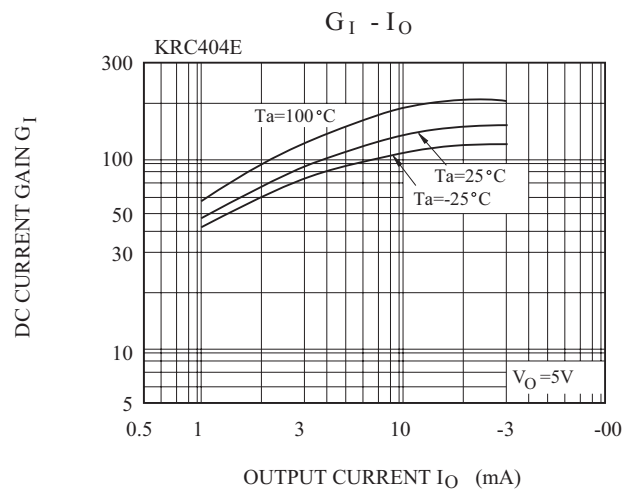
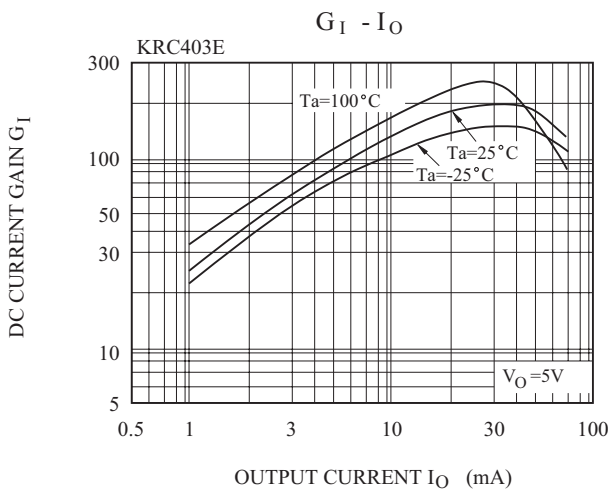
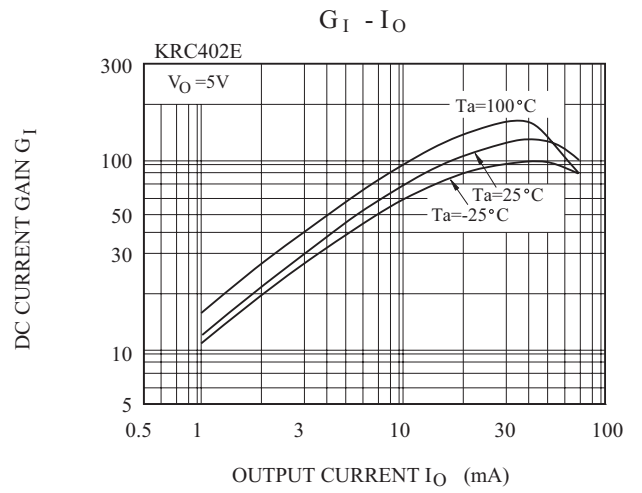
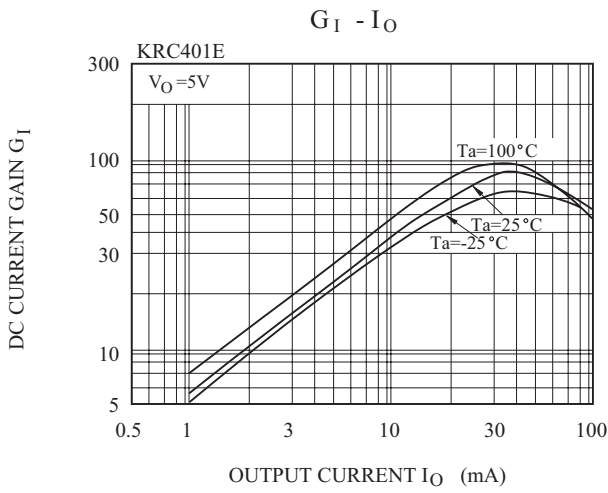
KRC401E~KRC406E



KRC401E~KRC406E



KRC401E~KRC406E



KRC401E~KRC406E

