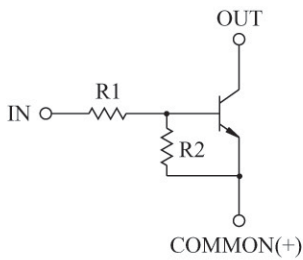


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

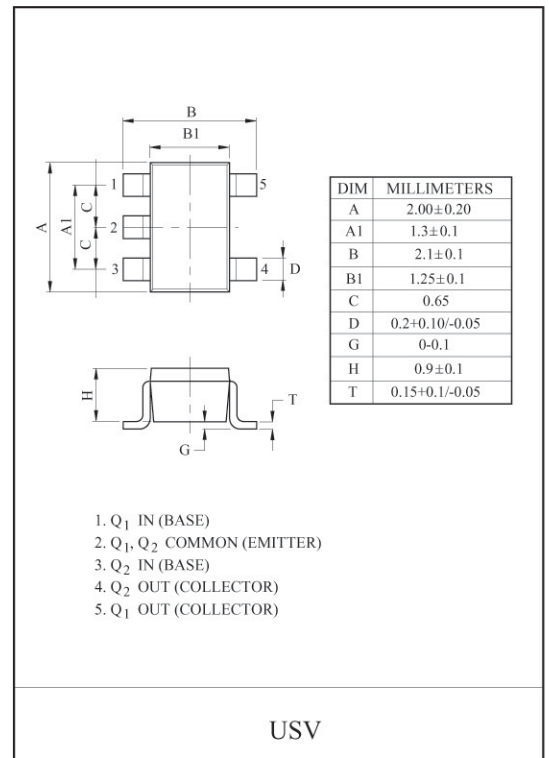
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

EQUIVALENT CIRCUIT

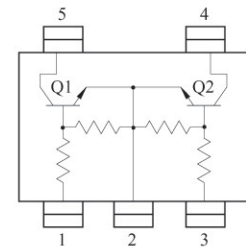


BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC651U	4.7	4.7
KRC652U	10	10
KRC653U	22	22
KRC654U	47	47
KRC655U	2.2	47
KRC656U	4.7	47



EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25°C)

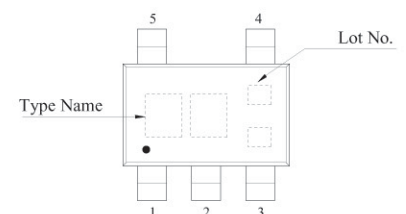
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC651U ~ 656U	V_o	50	V
Input Voltage	KRC651U	V_i	20, -10	V
	KRC652U		30, -10	
	KRC653U		40, -10	
	KRC654U		40, -10	
	KRC655U		12, -5	
	KRC656U		20, -5	
Output Current	KRC651U ~ 656U	I_o	100	mA
Power Dissipation		P_D	200	mW
Junction Temperature		T	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

Total Rating.

Marking

MARK SPEC

TYPE	KRC651U	KRC652U	KRC653U	KRC654U	KRC655U	KRC656U
MARK	NA	NB	NC	ND	NE	NF



KRC651U~KRC656U

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC651U ~ 656U	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC651U	G_I	$V_O=5V, I_O=10mA$	30	55	-	
	KRC652U			50	80	-	
	KRC653U			70	120	-	
	KRC654U			80	200	-	
	KRC655U			80	200	-	
	KRC656U			80	200	-	
Output Voltage	KRC651U ~ 656U	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC651U	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.5	2.0	V
	KRC652U			-	1.8	2.4	
	KRC653U			-	2.1	3.0	
	KRC654U			-	2.8	5.0	
	KRC655U			-	0.8	1.1	
	KRC656U			-	0.9	1.3	
Input Voltage (OFF)	KRC651U ~ 654U	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	1.0	1.2	-	V
	KRC655U ~ 656U			0.5	0.65	-	
Transition Frequency	KRC651U ~ 656U	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	KRC651U	I_I	$V_I=5V$	-	-	1.8	mA
	KRC652U			-	-	0.88	
	KRC653U			-	-	0.36	
	KRC654U			-	-	0.18	
	KRC655U			-	-	3.6	
	KRC656U			-	-	1.8	
Input Resistor	KRC651U	R1	-	3.29	4.7	6.11	k Ω
	KRC652U			7	10	13	
	KRC653U			15.4	22	28.6	
	KRC654U			32.9	47	61.1	
	KRC655U			1.54	2.2	2.86	
	KRC656U			3.29	4.7	6.11	
Resistor Ratio	KRC651U ~ 654U	R2/R1	-	0.8	1.0	1.2	
	KRC655U			17	21	26	
	KRC656U			8	10	12	

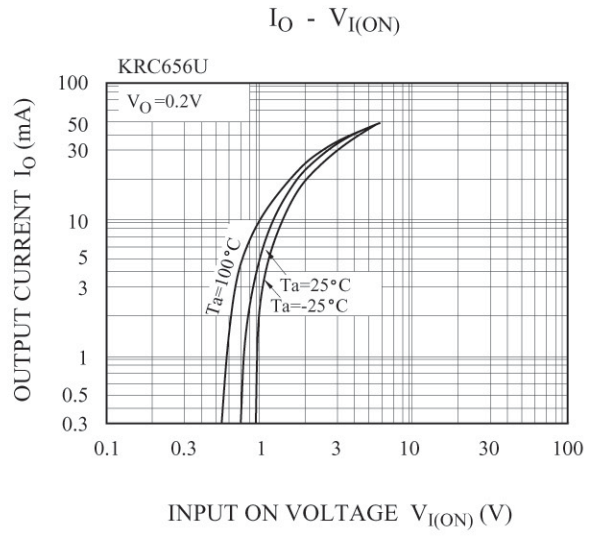
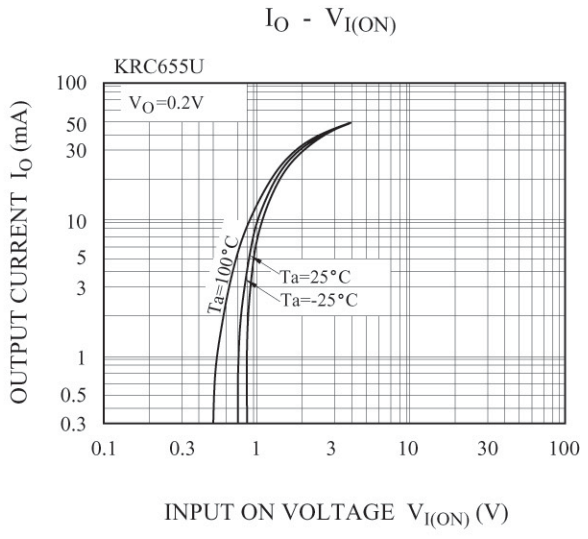
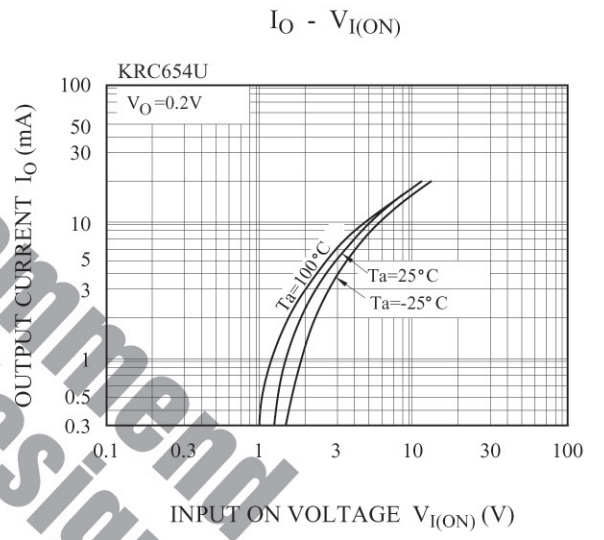
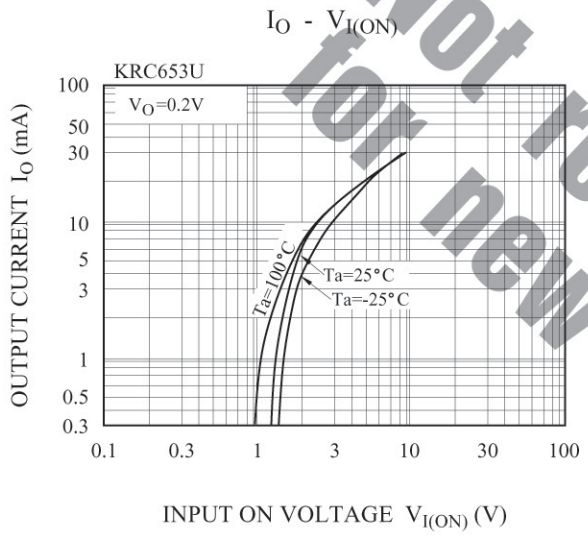
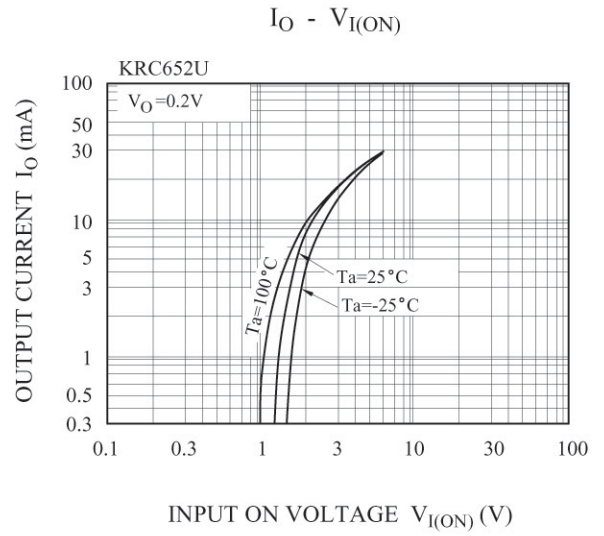
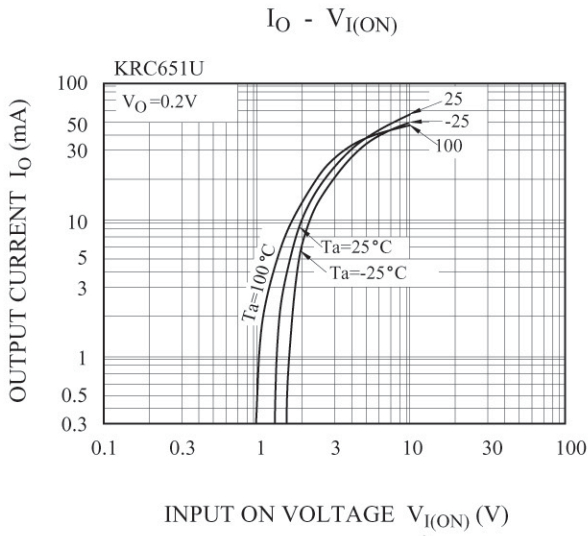
Note : * Characteristic of Transistor Only.

KRC651U~KRC656U

ELECTRICAL CHARACTERISTICS (Ta=25°C)

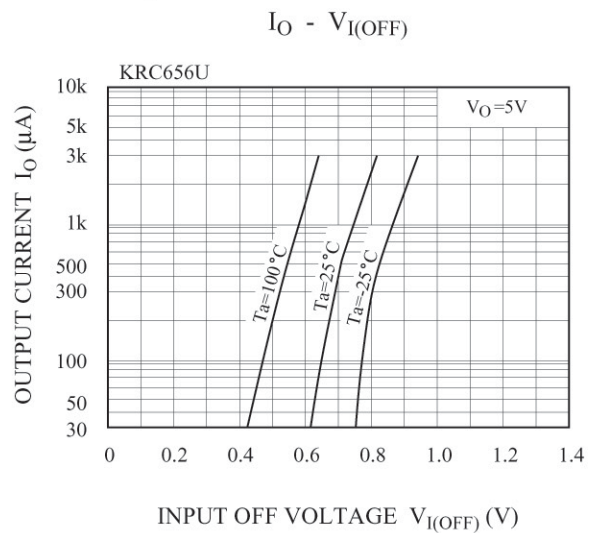
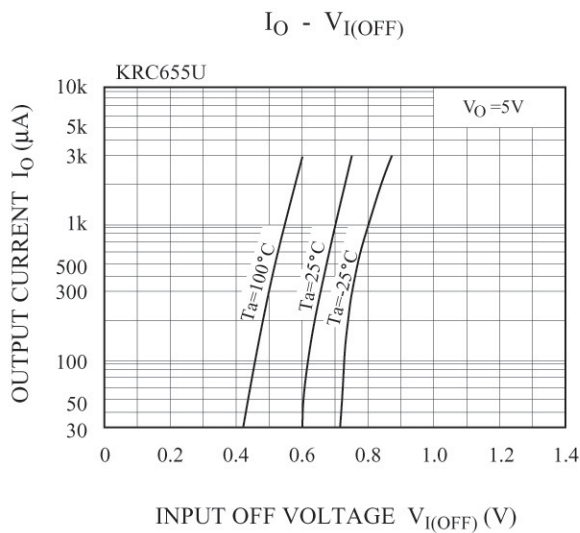
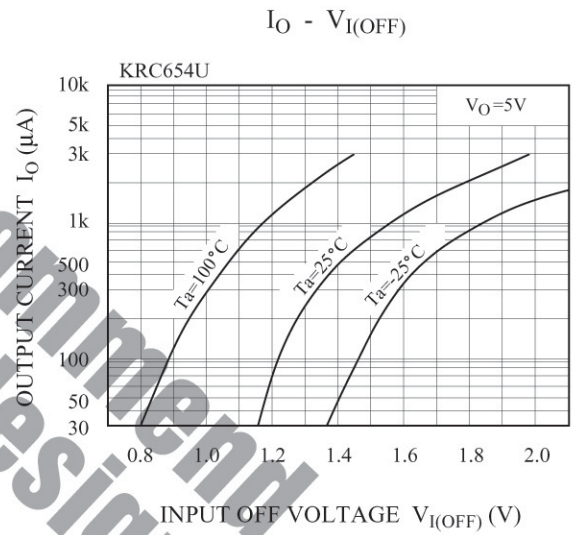
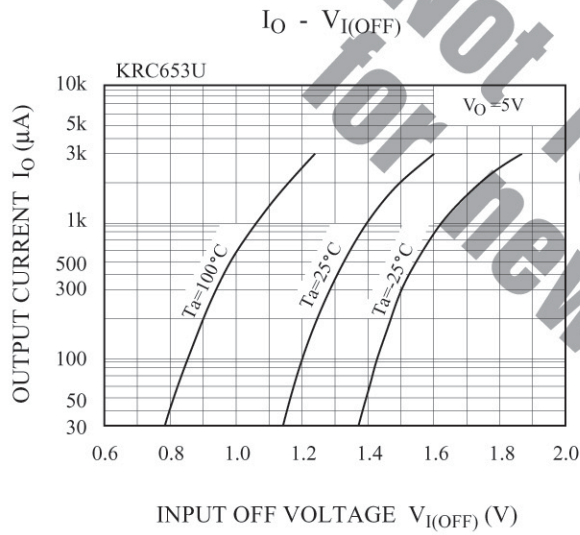
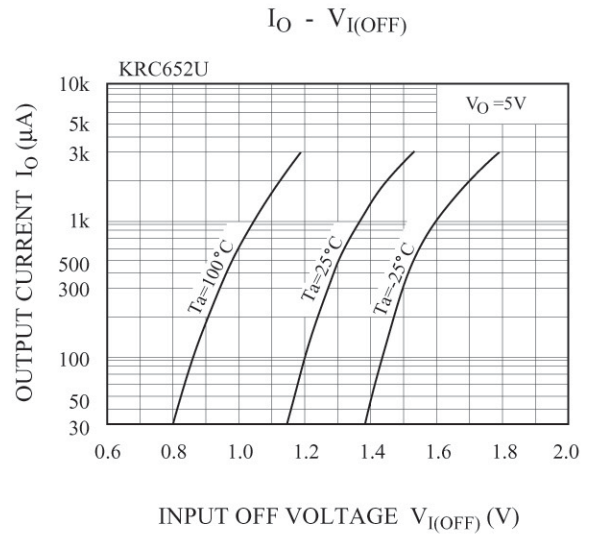
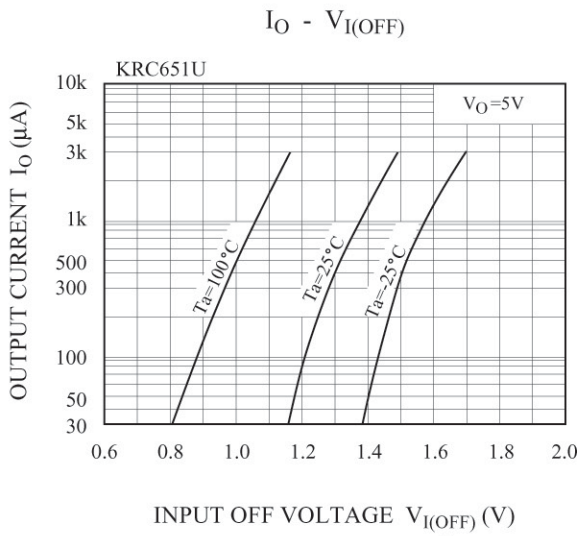
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC651U	V _O =5V V _{IN} =5V R _L =1kΩ	-	0.03	-	μS
		KRC652U		-	0.05	-	
		KRC653U		-	0.12	-	
		KRC654U		-	0.22	-	
		KRC655U		-	0.01	-	
		KRC656U		-	0.03	-	
	Storage Time	KRC651U		-	2.0	-	
		KRC652U		-	2.0	-	
		KRC653U		-	2.0	-	
		KRC654U		-	2.0	-	
		KRC655U		-	2.0	-	
		KRC656U		-	2.0	-	
	Fall Time	KRC651U		-	0.12	-	
		KRC652U		-	0.36	-	
		KRC653U		-	0.35	-	
		KRC654U		-	0.6	-	
		KRC655U		-	0.1	-	
		KRC656U		-	0.19	-	

KRC651U~KRC656U



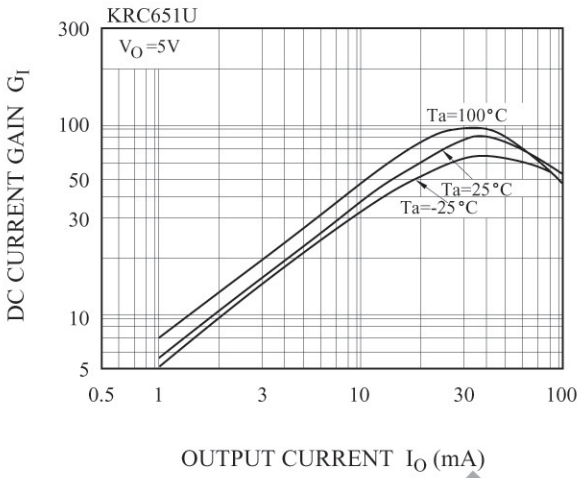
Not recommended for new design

KRC651U~KRC656U

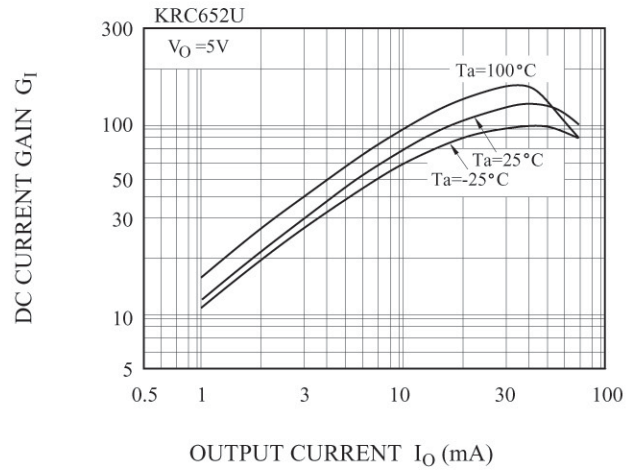


KRC651U~KRC656U

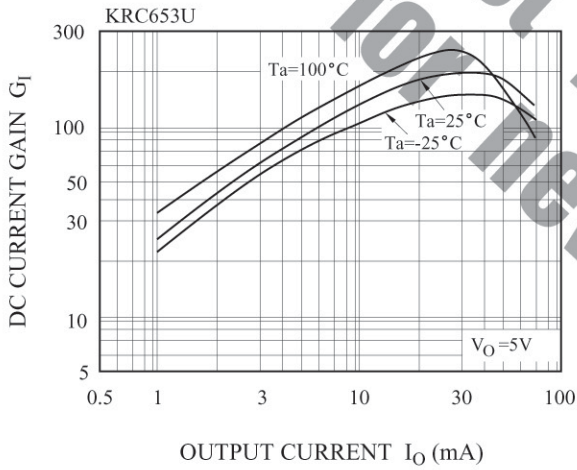
$G_I - I_O$



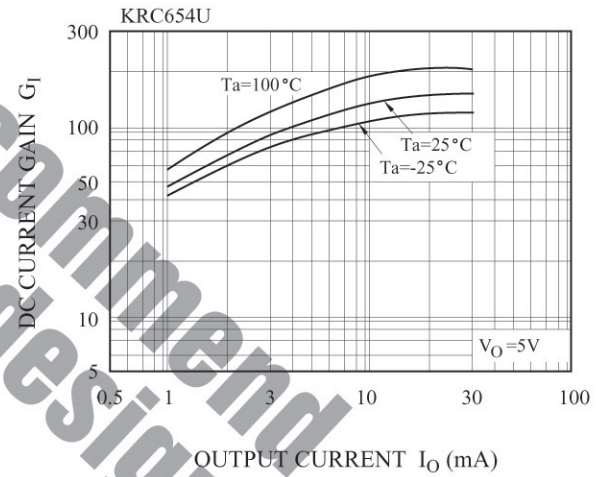
$G_I - I_O$



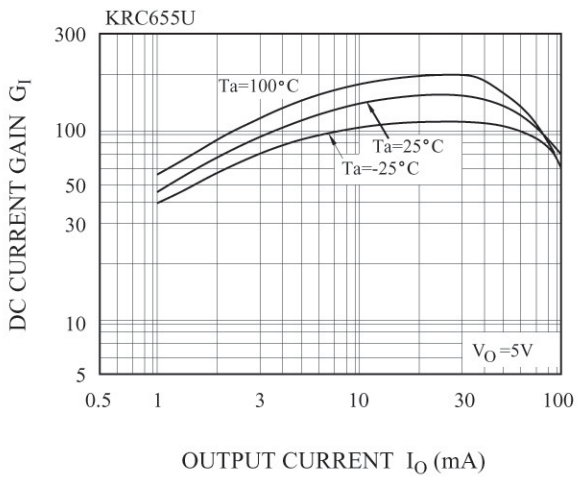
$G_I - I_O$



$G_I - I_O$



$G_I - I_O$



$G_I - I_O$

