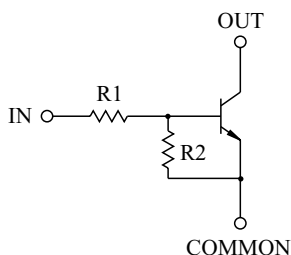


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

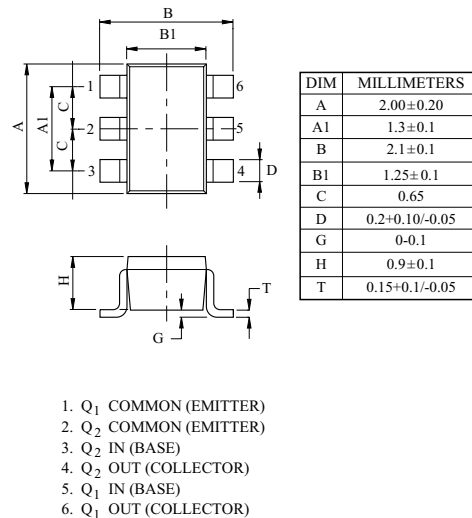
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.
- Suffix U : Qualified to AEC-Q101.
ex) KRC821U-RTK/HU

EQUIVALENT CIRCUIT



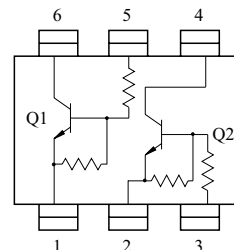
BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC821U	4.7	4.7
KRC822U	10	10
KRC823U	22	22
KRC824U	47	47
KRC825U	2.2	47
KRC826U	4.7	47



US6

EQUIVALENT CIRCUIT (TOP VIEW)



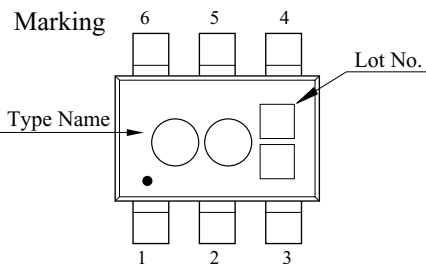
MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC821U 826U	V _O	50	V
Input Voltage	KRC821U	V _I	20, -10	V
	KRC822U		30, -10	
	KRC823U		40, -10	
	KRC824U		40, -10	
	KRC825U		12, -5	
	KRC826U		20, -5	
Output Current	KRC821U 826U	I _O	100	mA
Power Dissipation		P _D *	200	mW
Junction Temperature		T _j	-55~150	
Storage Temperature Range		T _{stg}	-55~150	

* Total Rating.

MARK SPEC

TYPE	KRC821U	KRC822U	KRC823U	KRC824U	KRC825U	KRC826U
MARK	YA	YB	YC	YD	YE	YF



KRC821U~KRC826U

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC821U 826U	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC821U	G_I	$V_O=5V, I_O=10mA$	30	55	-	
	KRC822U			50	80	-	
	KRC823U			70	120	-	
	KRC824U			80	200	-	
	KRC825U			80	200	-	
	KRC826U			80	200	-	
Output Voltage	KRC821U 826U	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC821U	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.5	2.0	V
	KRC822U			-	1.8	2.4	
	KRC823U			-	2.1	3.0	
	KRC824U			-	2.8	5.0	
	KRC825U			-	0.8	1.1	
	KRC826U			-	0.9	1.3	
Input Voltage (OFF)	KRC821U 824U	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	1.0	1.2	-	V
	KRC825U 826U			0.5	0.65	-	
Transition Frequency	KRC821U 826U	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	KRC821U	I_I	$V_I=5V$	-	-	1.8	mA
	KRC822U			-	-	0.88	
	KRC823U			-	-	0.36	
	KRC824U			-	-	0.18	
	KRC825U			-	-	3.6	
	KRC826U			-	-	1.8	
Input Resistor	KRC821U	R1	-	3.29	4.7	6.11	kΩ
	KRC822U			7	10	13	
	KRC823U			15.4	22	28.6	
	KRC824U			32.9	47	61.1	
	KRC825U			1.54	2.2	2.86	
	KRC826U			3.29	4.7	6.11	
Resistor Ratio	KRC821U 824U	R2/R1	-	0.8	1.0	1.2	
	KRC825U			17	21	26	
	KRC826U			8	10	12	

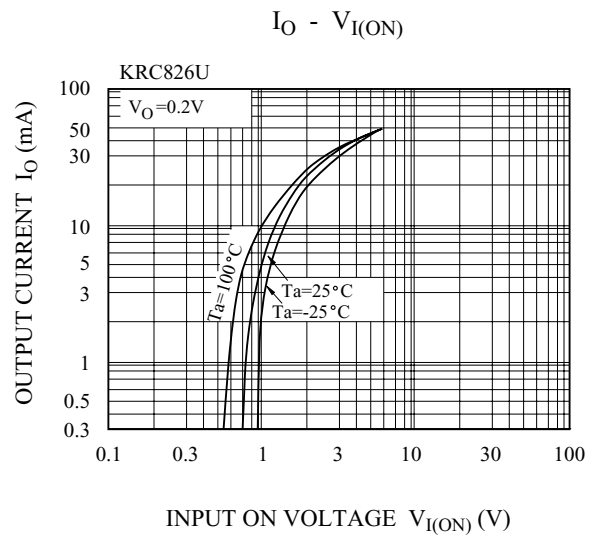
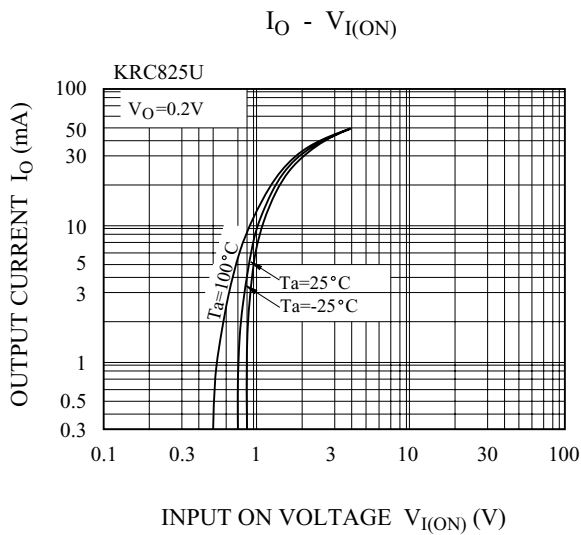
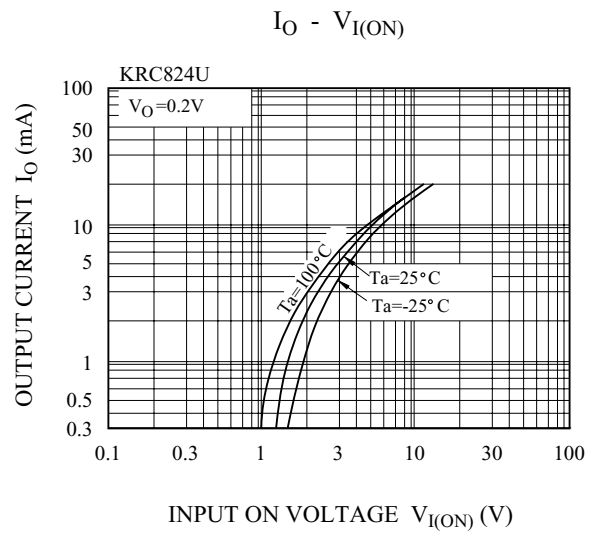
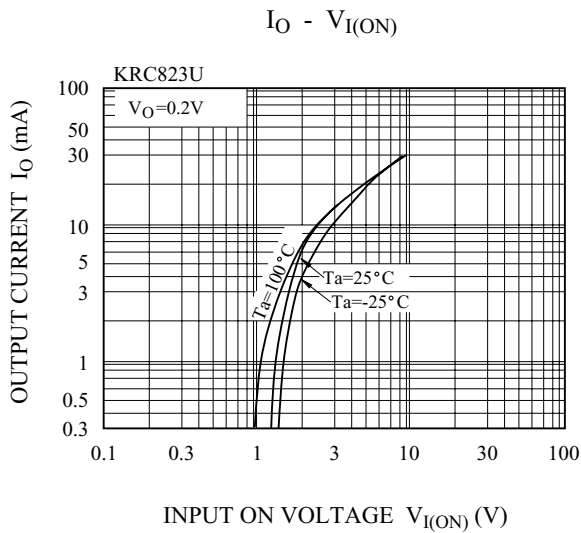
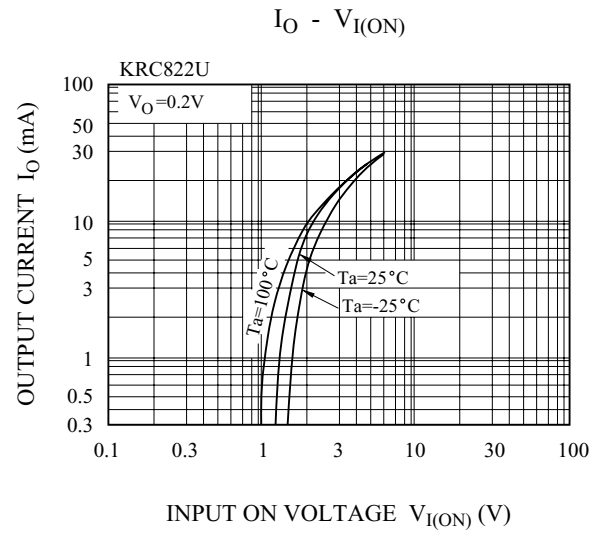
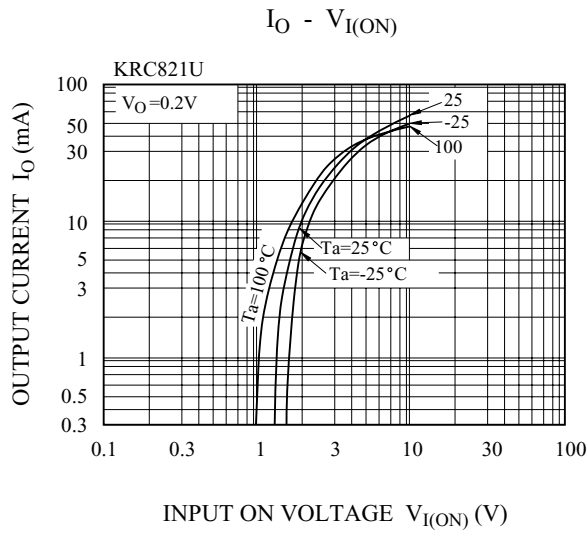
Note : * Characteristic of Transistor Only.

KRC821U~KRC826U

ELECTRICAL CHARACTERISTICS (Ta=25)

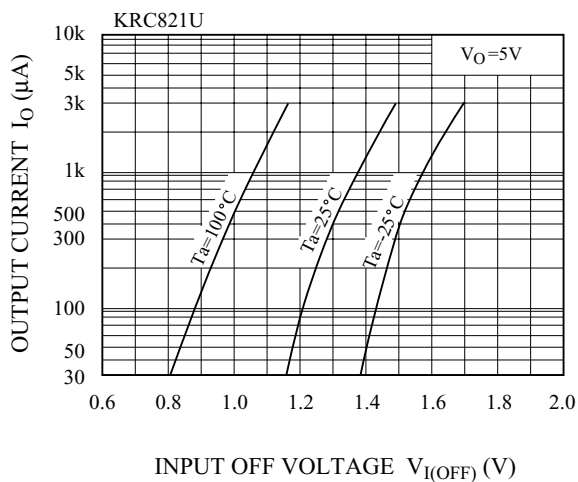
CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC821U	t _r	V _O =5V V _{IN} =5V R _L =1kΩ	-	0.03	-	μs
		KRC822U			-	0.05	-	
		KRC823U			-	0.12	-	
		KRC824U			-	0.22	-	
		KRC825U			-	0.01	-	
		KRC826U			-	0.03	-	
	Storage Time	KRC821U	t _{stg}		-	2.0	-	
		KRC822U			-	2.0	-	
		KRC823U			-	2.0	-	
		KRC824U			-	2.0	-	
		KRC825U			-	2.0	-	
		KRC826U			-	2.0	-	
	Fall Time	KRC821U	t _f		-	0.12	-	
		KRC822U			-	0.36	-	
		KRC823U			-	0.35	-	
		KRC824U			-	0.6	-	
		KRC825U			-	0.1	-	
		KRC826U			-	0.19	-	

KRC821U~KRC826U

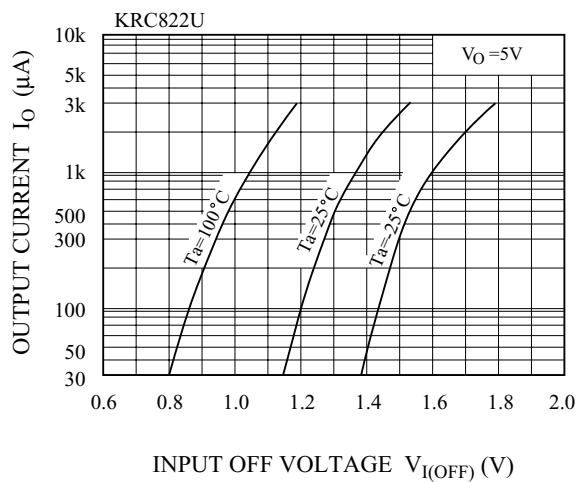


KRC821U~KRC826U

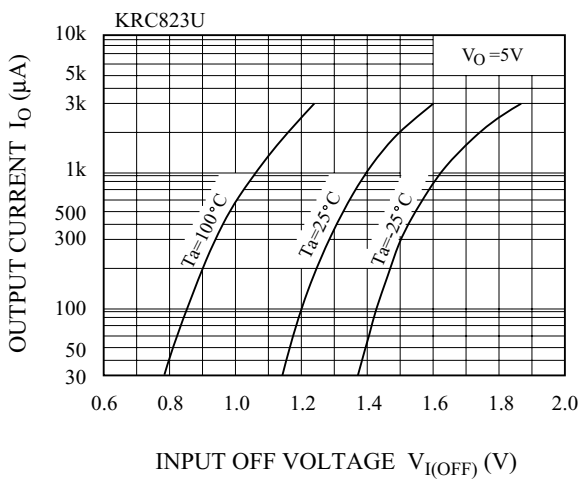
$I_O - V_{I(OFF)}$



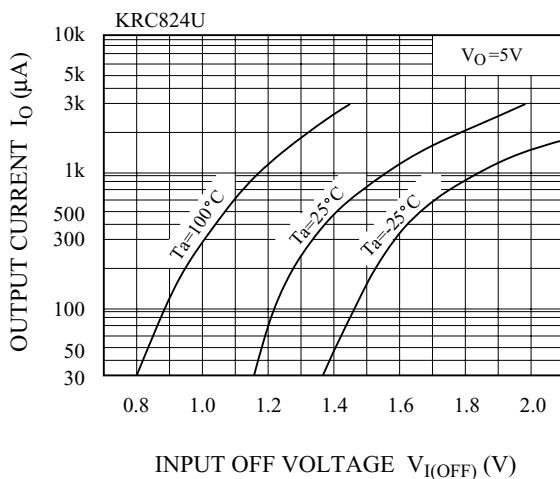
$I_O - V_{I(OFF)}$



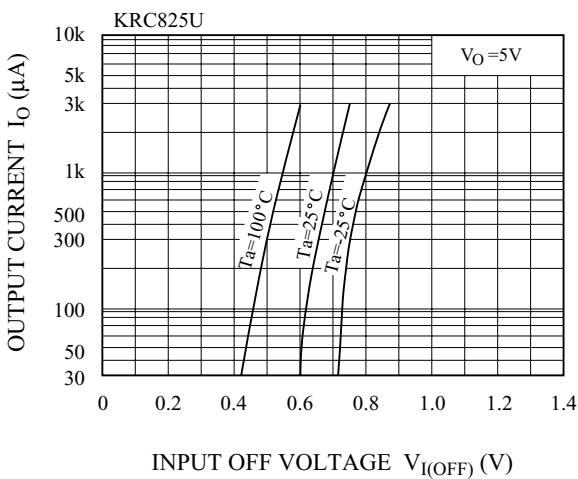
$I_O - V_{I(OFF)}$



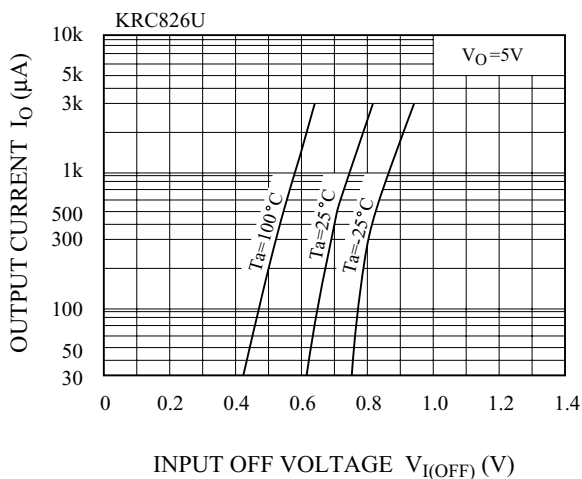
$I_O - V_{I(OFF)}$



$I_O - V_{I(OFF)}$

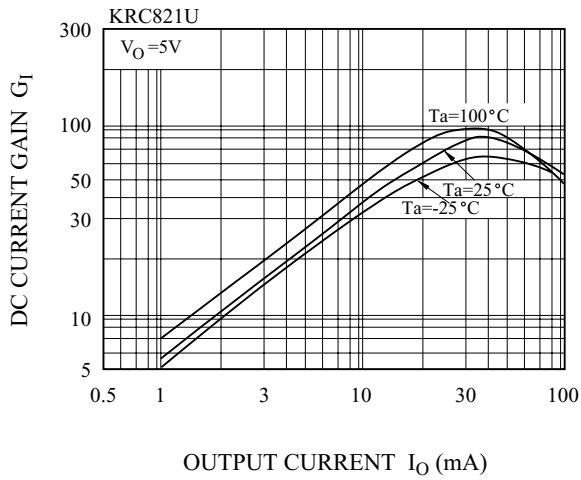


$I_O - V_{I(OFF)}$

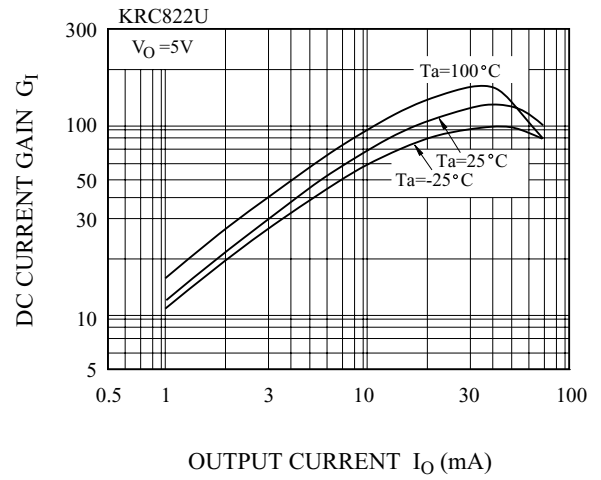


KRC821U~KRC826U

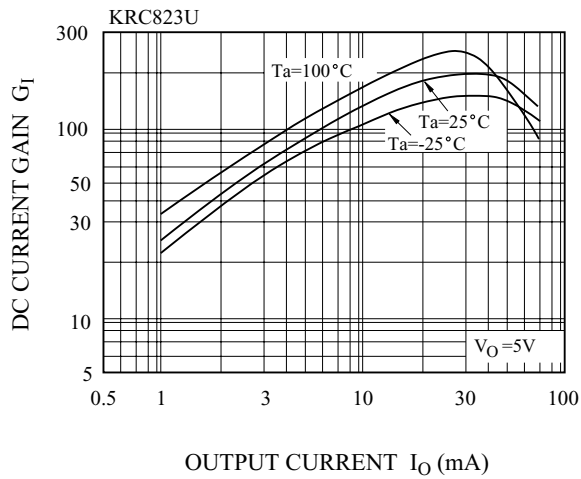
$G_I - I_O$



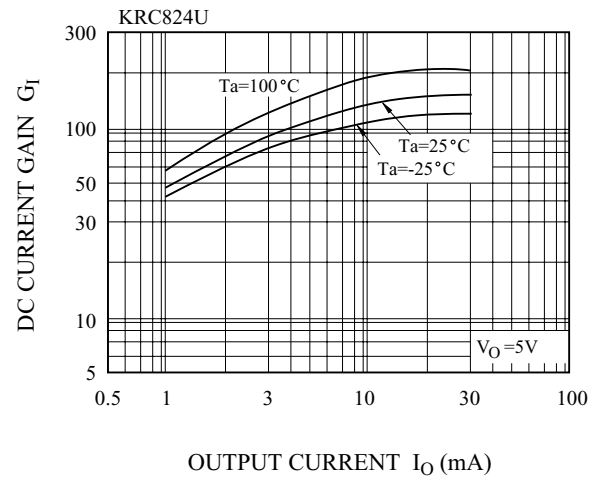
$G_I - I_O$



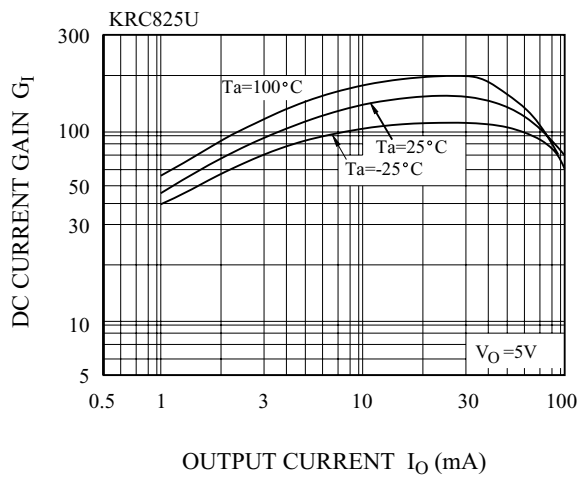
$G_I - I_O$



$G_I - I_O$



$G_I - I_O$



$G_I - I_O$

