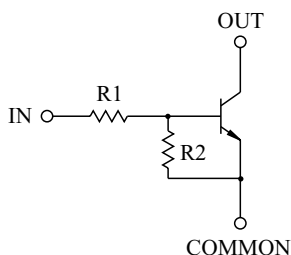


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

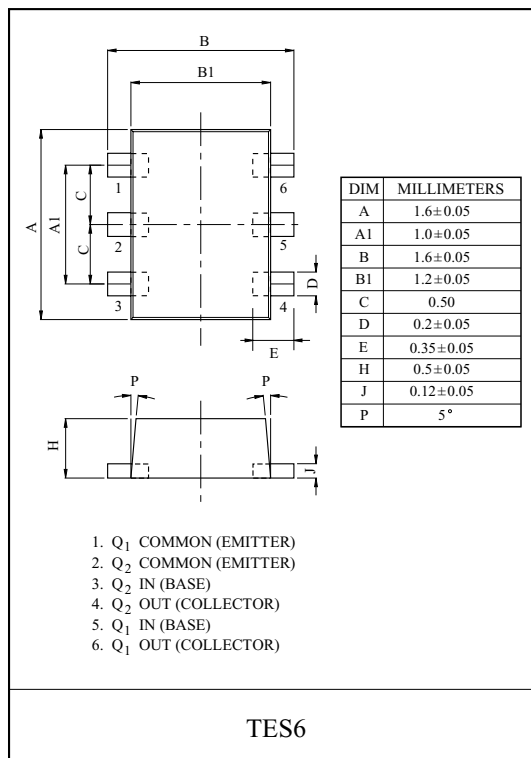
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.
- Suffix U : Qualified to AEC-Q101.
ex) KRC821E-RTK/HU

EQUIVALENT CIRCUIT

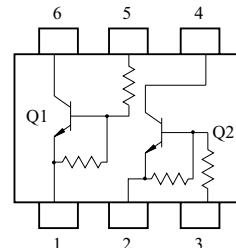


BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC821E	4.7	4.7
KRC822E	10	10
KRC823E	22	22
KRC824E	47	47
KRC825E	2.2	47
KRC826E	4.7	47



EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25 °C)

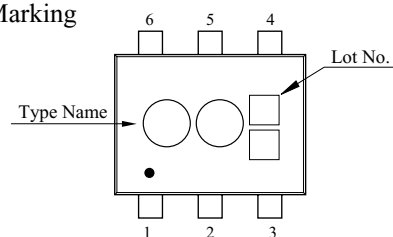
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC821E 826E	V _O	50	V
Input Voltage	KRC821E	V _I	20, -10	V
	KRC822E		30, -10	
	KRC823E		40, -10	
	KRC824E		40, -10	
	KRC825E		12, -5	
	KRC826E		20, -5	
Output Current	KRC821E 826E	I _O	100	mA
Power Dissipation		P _D *	200	mW
Junction Temperature		T _j	-55~150	
Storage Temperature Range		T _{stg}	-55~150	

* Total Rating.

MARK SPEC

TYPE	KRC821E	KRC822E	KRC823E	KRC824E	KRC825E	KRC826E
MARK	YA	YB	YC	YD	YE	YF

Marking



KRC821E~KRC826E

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC821E 826E	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC821E	G_I	$V_O=5V, I_O=10mA$	30	55	-	
	KRC822E			50	80	-	
	KRC823E			70	120	-	
	KRC824E			80	200	-	
	KRC825E			80	200	-	
	KRC826E			80	200	-	
Output Voltage	KRC821E 826E	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC821E	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.5	2.0	V
	KRC822E			-	1.8	2.4	
	KRC823E			-	2.1	3.0	
	KRC824E			-	2.8	5.0	
	KRC825E			-	0.8	1.1	
	KRC826E			-	0.9	1.3	
Input Voltage (OFF)	KRC821E 824E	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	1.0	1.2	-	V
	KRC825E 826E			0.5	0.65	-	
Transition Frequency	KRC821E 826E	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	KRC821E	I_I	$V_I=5V$	-	-	1.8	mA
	KRC822E			-	-	0.88	
	KRC823E			-	-	0.36	
	KRC824E			-	-	0.18	
	KRC825E			-	-	3.6	
	KRC826E			-	-	1.8	
Input Resistor	KRC821E	R1	-	3.29	4.7	6.11	kΩ
	KRC822E			7	10	13	
	KRC823E			15.4	22	28.6	
	KRC824E			32.9	47	61.1	
	KRC825E			1.54	2.2	2.86	
	KRC826E			3.29	4.7	6.11	
Resistor Ratio	KRC821E 824E	R2/R1	-	0.8	1.0	1.2	
	KRC825E			17	21	26	
	KRC826E			8	10	12	

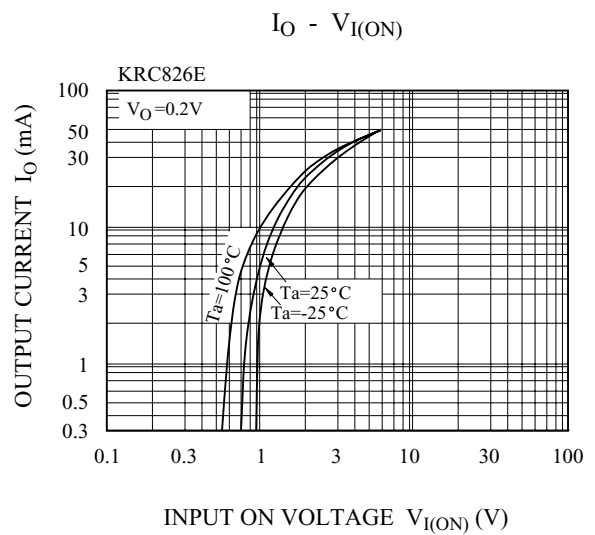
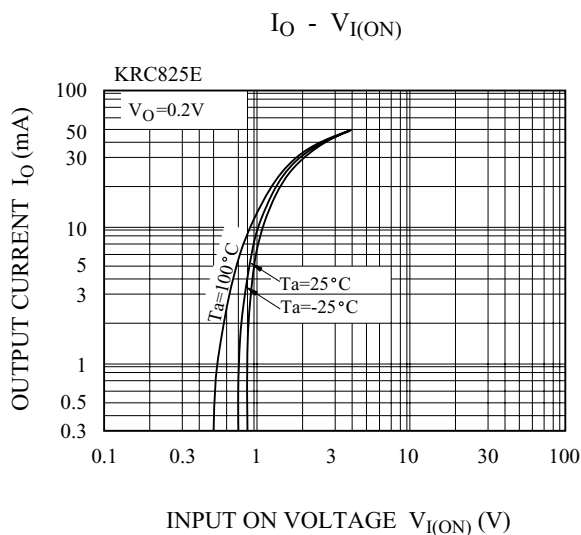
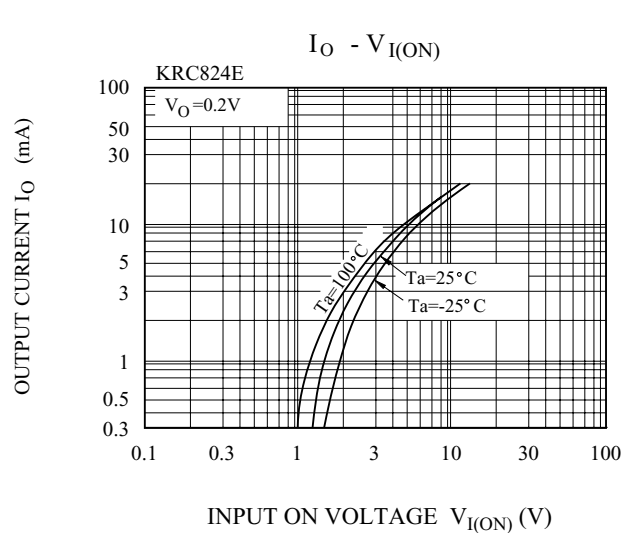
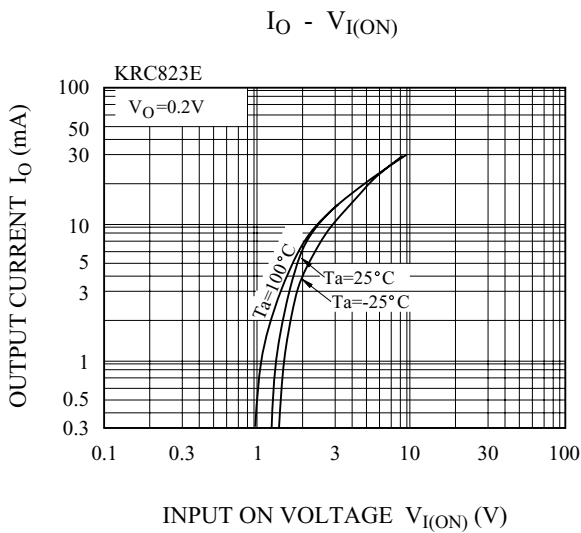
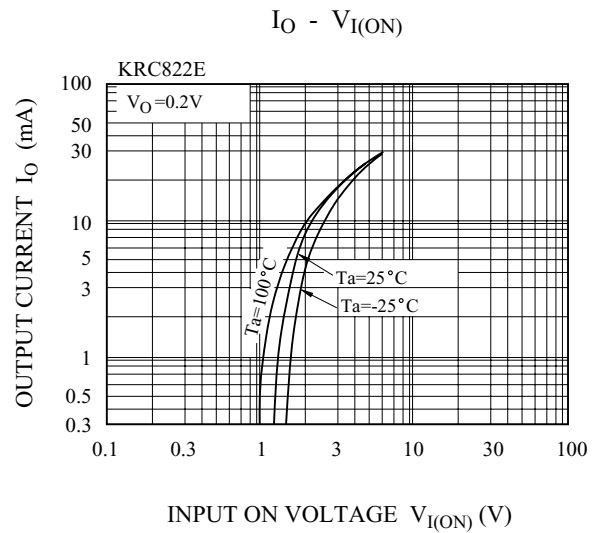
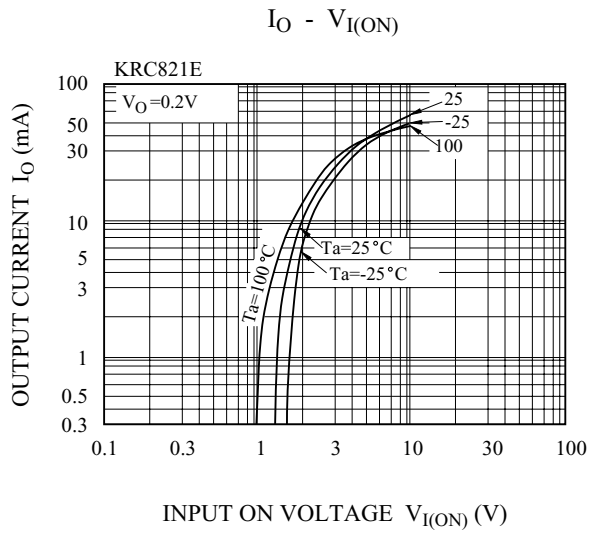
Note : * Characteristic of Transistor Only.

KRC821E~KRC826E

ELECTRICAL CHARACTERISTICS (Ta=25)

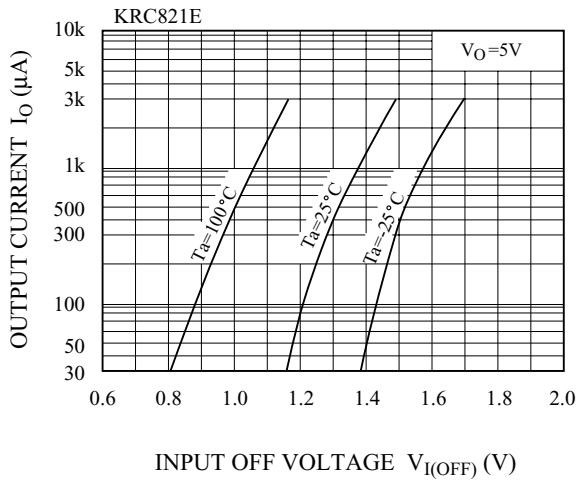
CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC821E	t_r	$V_O=5V$ $V_{IN}=5V$ $R_L=1k\Omega$	-	0.03	-	μs
		KRC822E			-	0.05	-	
		KRC823E			-	0.12	-	
		KRC824E			-	0.22	-	
		KRC825E			-	0.01	-	
		KRC826E			-	0.03	-	
	Storage Time	KRC821E	t_{stg}		-	2.0	-	
		KRC822E			-	2.0	-	
		KRC823E			-	2.0	-	
		KRC824E			-	2.0	-	
		KRC825E			-	2.0	-	
		KRC826E			-	2.0	-	
	Fall Time	KRC821E	t_f		-	0.12	-	
		KRC822E			-	0.36	-	
		KRC823E			-	0.35	-	
		KRC824E			-	0.6	-	
		KRC825E			-	0.1	-	
		KRC826E			-	0.19	-	

KRC821E~KRC826E

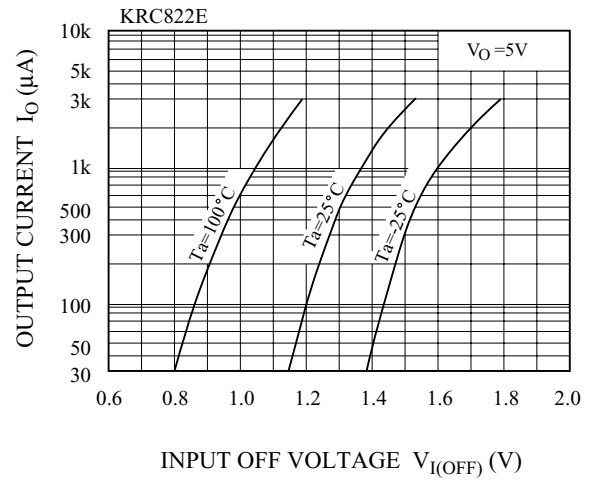


KRC821E~KRC826E

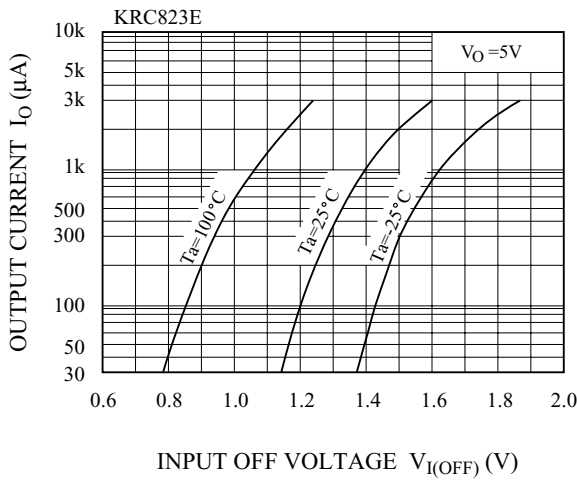
$I_O - V_{I(OFF)}$



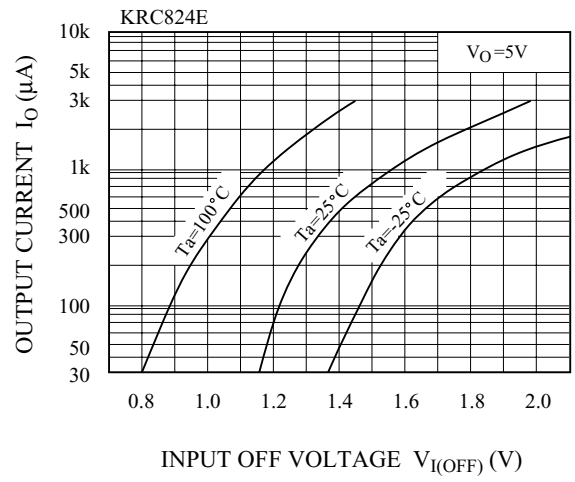
$I_O - V_{I(OFF)ON}$



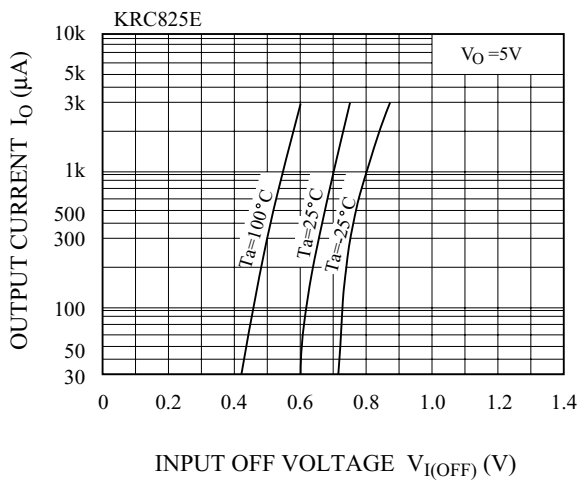
$I_O - V_{I(OFF)}$



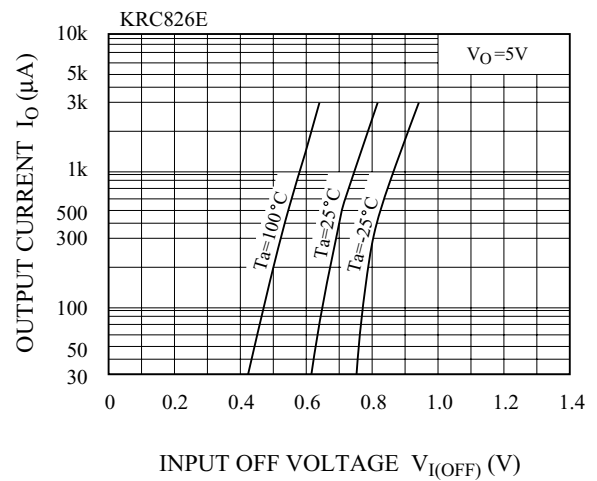
$I_O - V_{I(OFF)}$



$I_O - V_{I(OFF)}$

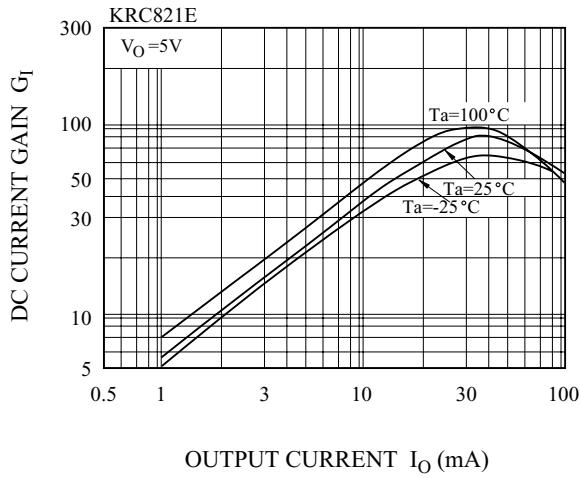


$I_O - V_{I(OFF)}$

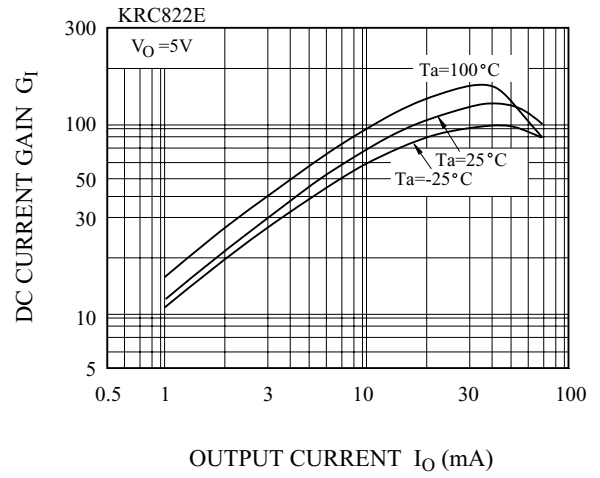


KRC821E~KRC826E

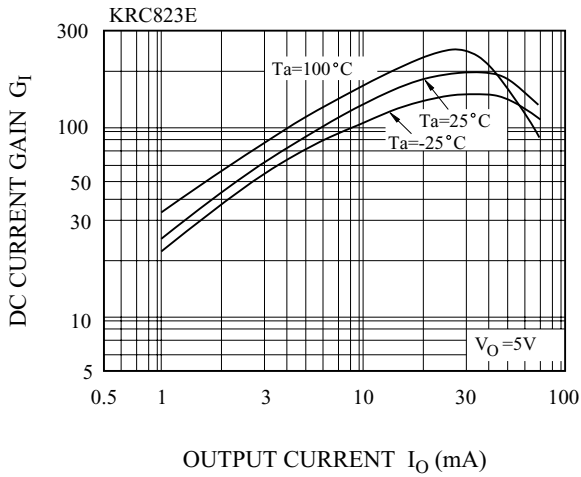
$G_I - I_O$



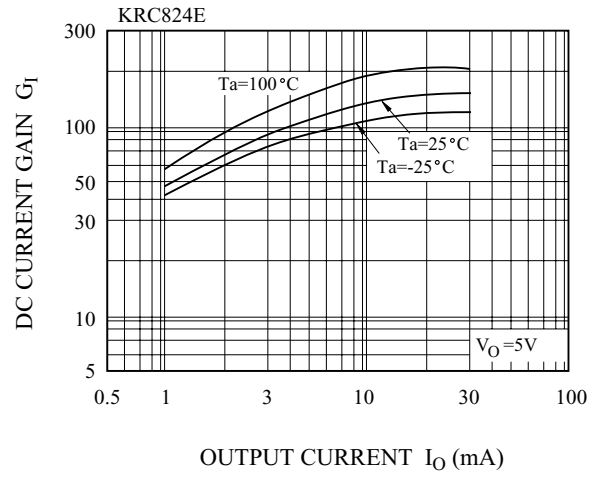
$G_I - I_O$



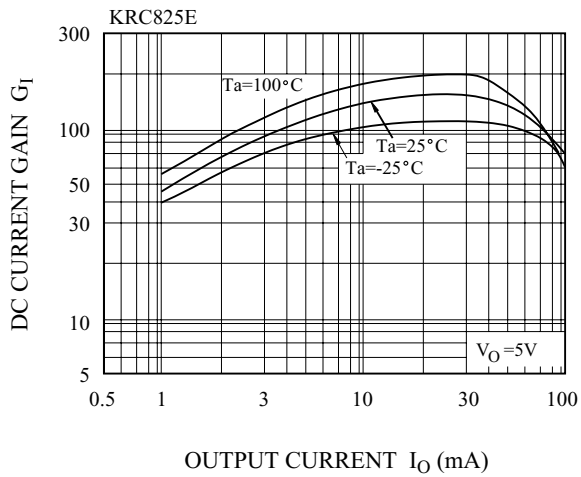
$G_I - I_O$



$G_I - I_O$



$G_I - I_O$



$G_I - I_O$

