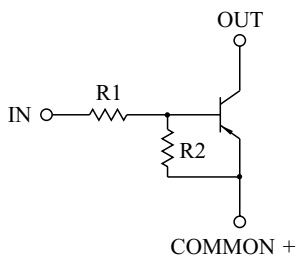


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

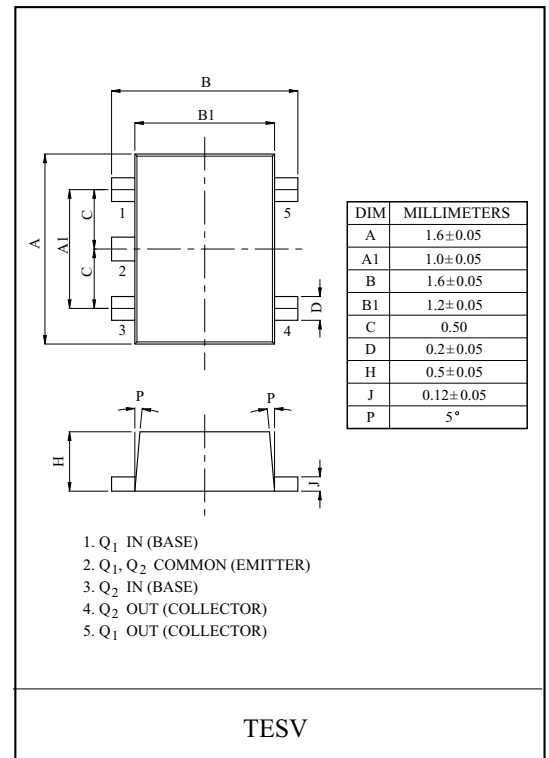
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.
- Suffix U : Qualified to AEC-Q101.
ex) KRA522E-RTK/HU

EQUIVALENT CIRCUIT

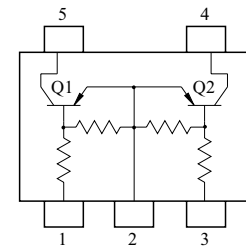


BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRA551E	4.7	4.7
KRA552E	10	10
KRA553E	22	22
KRA554E	47	47
KRA555E	2.2	47
KRA556E	4.7	47



EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25°C)

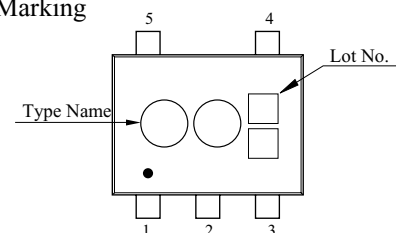
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA551E 556E	V _O	-50	V
Input Voltage	KRA551E	V _I	-20, 10	V
	KRA552E		-30, 10	
	KRA553E		-40, 10	
	KRA554E		-40, 10	
	KRA555E		-12, 5	
	KRA556E		-20, 5	
Output Current	KRA551E 556E	I _O	-100	mA
Power Dissipation		P _D *	200	mW
Junction Temperature		T _j	-55~150	°C
Storage Temperature Range		T _{stg}	-55~150	°C

* Total Rating.

MARK SPEC

TYPE	KRA551E	KRA552E	KRA553E	KRA554E	KRA555E	KRA556E
MARK	PA	PB	PC	PD	PE	PF

Marking



KRA551E~KRA556E

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRA551E 556E	$I_{O(OFF)}$	$V_O=-50V, V_I=0$	-	-	-500	nA
DC Current Gain	KRA551E	G_I	$V_O=-5V, I_O=-10mA$	30	55	-	
	KRA552E			50	80	-	
	KRA553E			70	120	-	
	KRA554E			80	200	-	
	KRA555E			80	200	-	
	KRA556E			80	200	-	
Output Voltage	KRA551E 556E	$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	KRA551E	$V_{I(ON)}$	$V_O=-0.2V, I_O=-5mA$	-	-1.5	-2.0	V
	KRA552E			-	-1.8	-2.4	
	KRA553E			-	-2.1	-3.0	
	KRA554E			-	-2.8	-5.0	
	KRA555E			-	-0.8	-1.1	
	KRA556E			-	-0.9	-1.3	
Input Voltage (OFF)	KRA551E 554E	$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-1.0	-1.2	-	V
	KRA555E 556E			-0.5	-0.65	-	
Transition Frequency	KRA551E 556E	f_T^*	$V_O=-10V, I_O=-5mA$	-	200	-	MHz
Input Current	KRA551E	I_I	$V_I=-5V$	-	-	-1.8	mA
	KRA552E			-	-	-0.88	
	KRA553E			-	-	-0.36	
	KRA554E			-	-	-0.18	
	KRA555E			-	-	-3.6	
	KRA556E			-	-	-1.8	
Input Resistor	KRA551E	R1	-	3.29	4.7	6.11	kΩ
	KRA552E			7	10	13	
	KRA553E			15.4	22	28.6	
	KRA554E			32.9	47	61.1	
	KRA555E			1.54	2.2	2.86	
	KRA556E			3.29	4.7	6.11	
Resistor Ratio	KRA551E 554E	R2/R1	-	0.8	1.0	1.2	
	KRA555E			17	21	26	
	KRA556E			8	10	12	

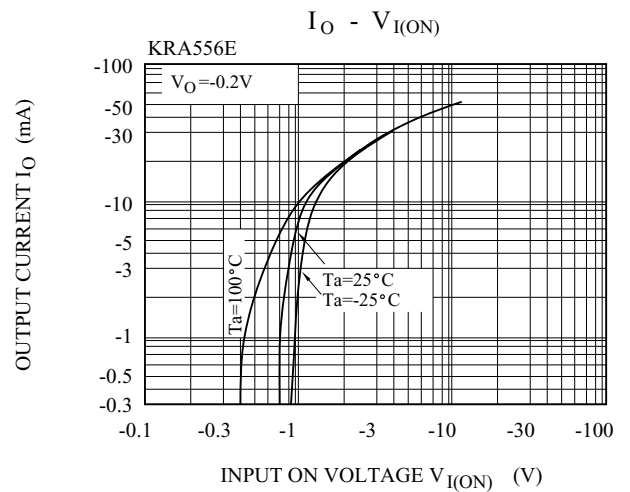
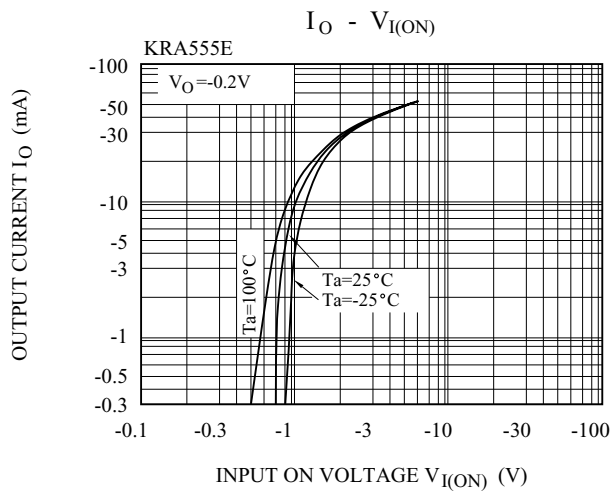
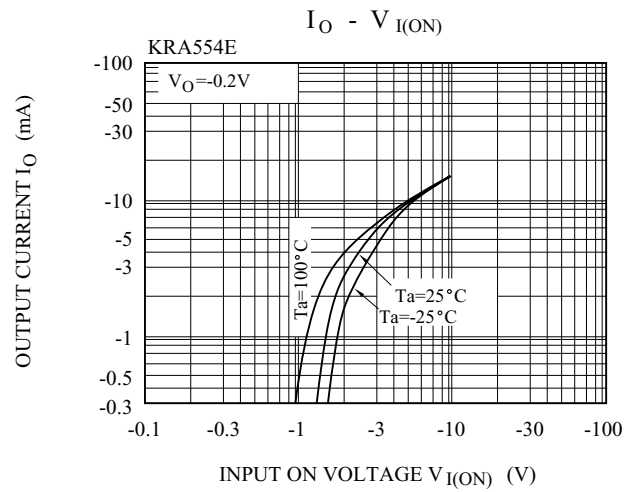
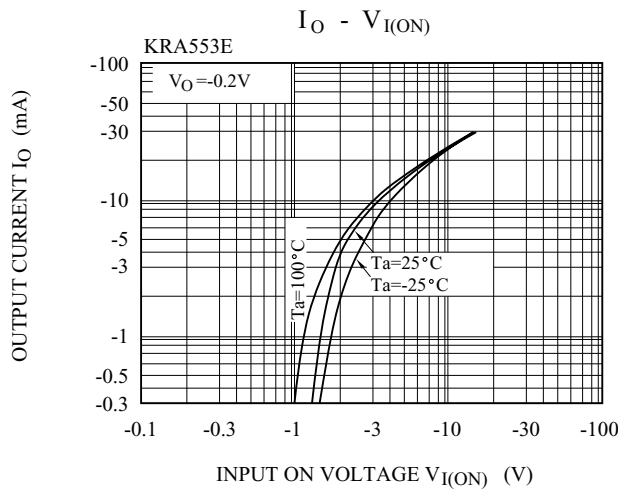
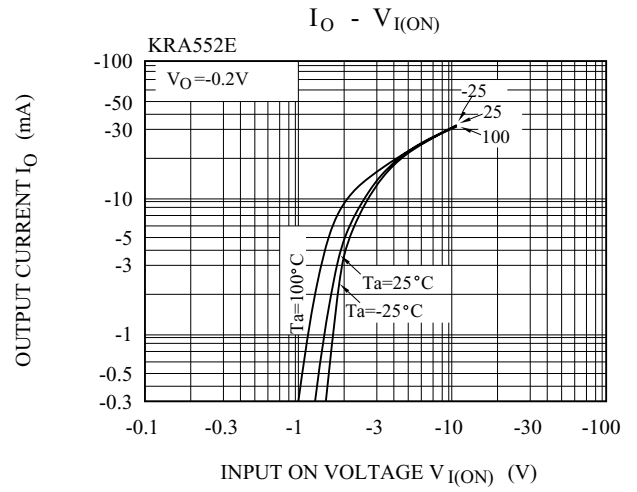
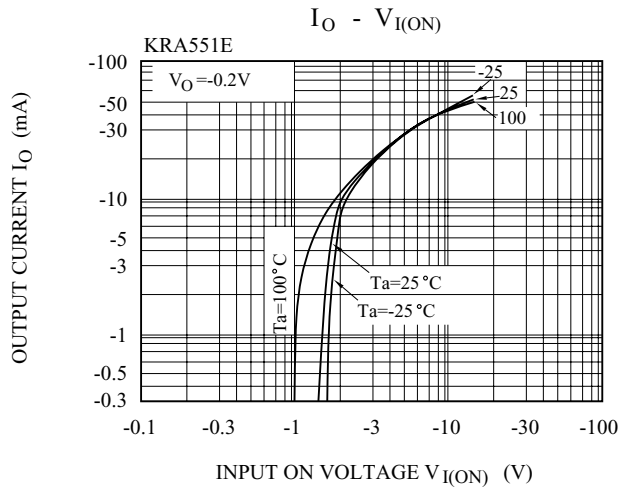
Note : * Characteristic of Transistor Only.

KRA551E~KRA556E

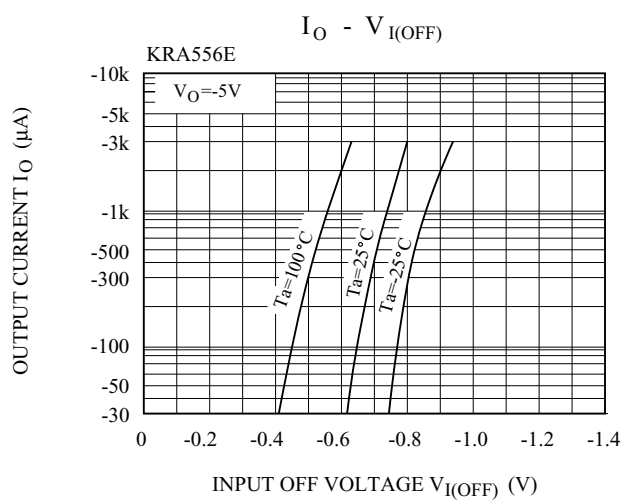
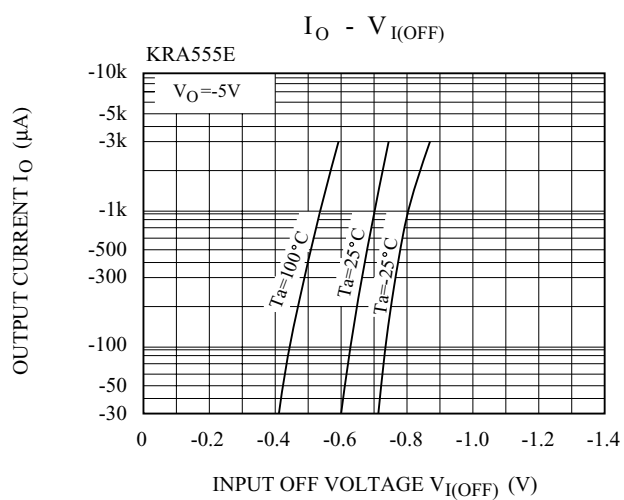
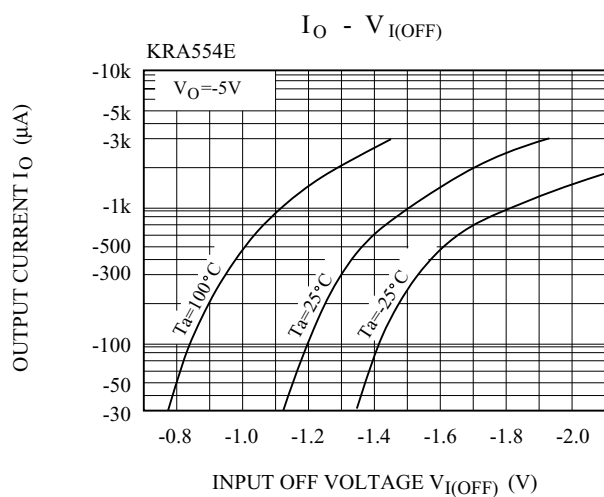
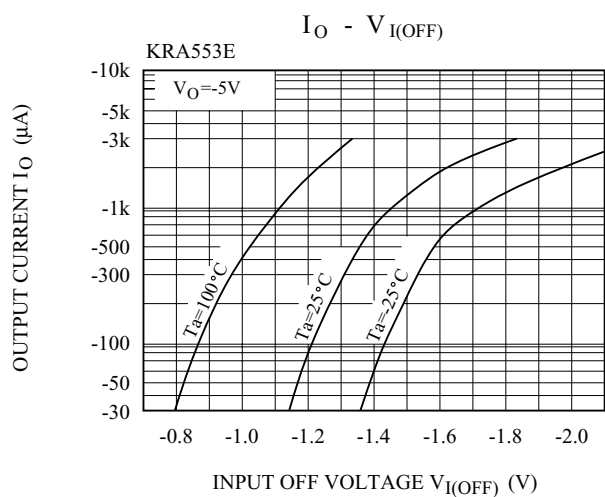
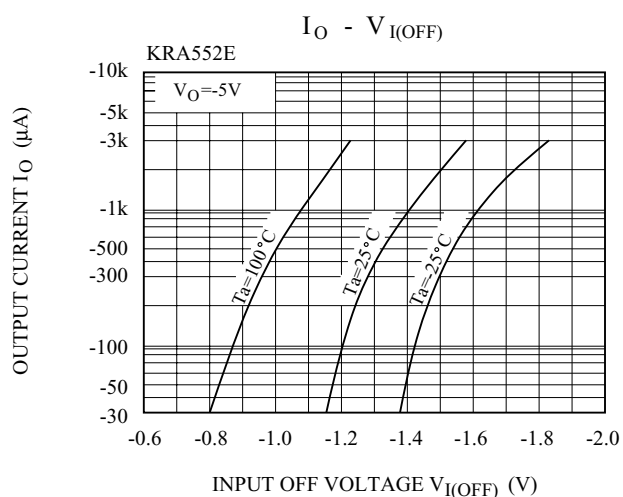
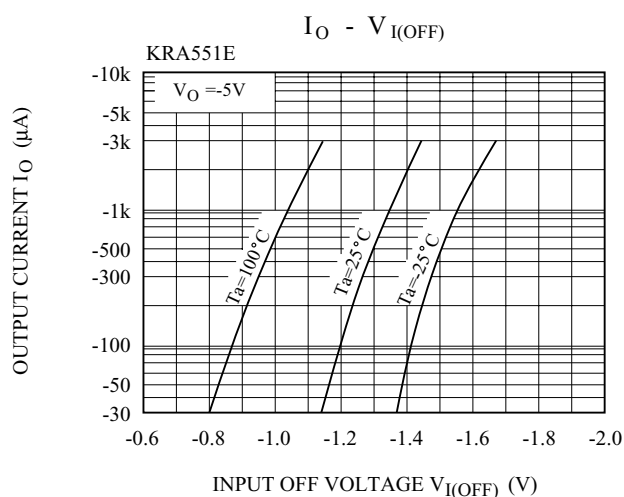
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRA551E	t _r	V _O =-5V V _{IN} =-5V R _L =1kΩ	-	0.07	-	μs
		KRA552E			-	0.06	-	
		KRA553E			-	0.2	-	
		KRA554E			-	0.24	-	
		KRA555E			-	0.02	-	
		KRA556E			-	0.07	-	
	Storage Time	KRA551E	t _{stg}		-	1.1	-	
		KRA552E			-	1.1	-	
		KRA553E			-	1.1	-	
		KRA554E			-	1.1	-	
		KRA555E			-	1.1	-	
		KRA556E			-	1.1	-	
	Fall Time	KRA551E	t _f		-	0.15	-	
		KRA552E			-	0.24	-	
		KRA553E			-	0.38	-	
		KRA554E			-	0.63	-	
		KRA555E			-	0.1	-	
		KRA556E			-	0.2	-	

KRA551E~KRA556E



KRA551E~KRA556E



KRA551E~KRA556E

