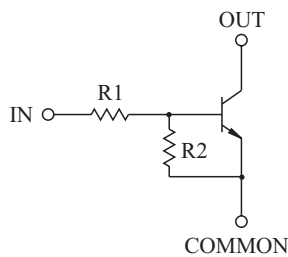


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

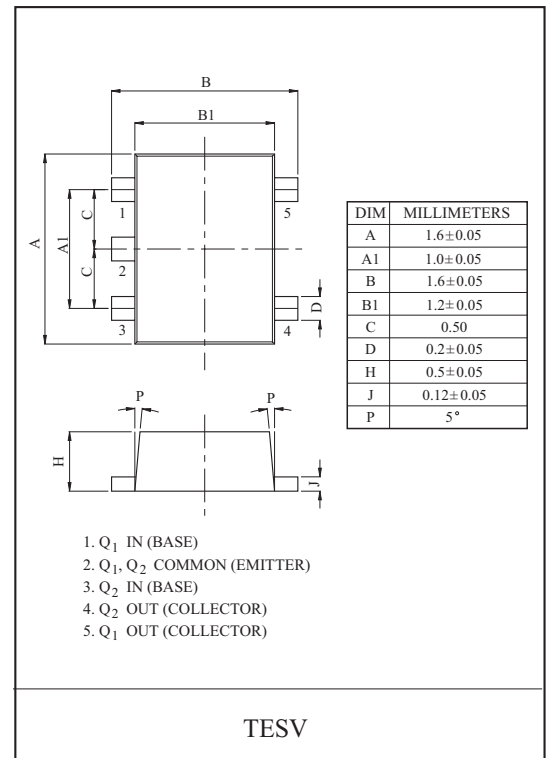
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

EQUIVALENT CIRCUIT

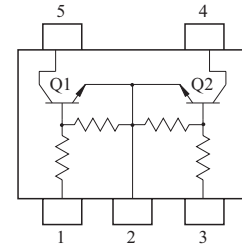


BIAS RESISTOR VALUES

TYPE NO.	R1(k)	R2(k)
KRC657E	10	47
KRC658E	22	47
KRC659E	47	22



EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25)

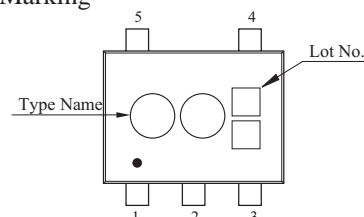
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC657E 659E	V_O	50	V
Input Voltage	KRC657E	V_I	30, -6	V
	KRC658E		40, -7	
	KRC659E		40, -15	
Output Current	KRC657E 659E	I_O	100	mA
Power Dissipation		P_D^*	200	mW
Junction Temperature		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	

* Total Rating.

MARK SPEC

TYPE	KRC657E	KRC658E	KRC659E
MARK	NH	NI	NJ

Marking



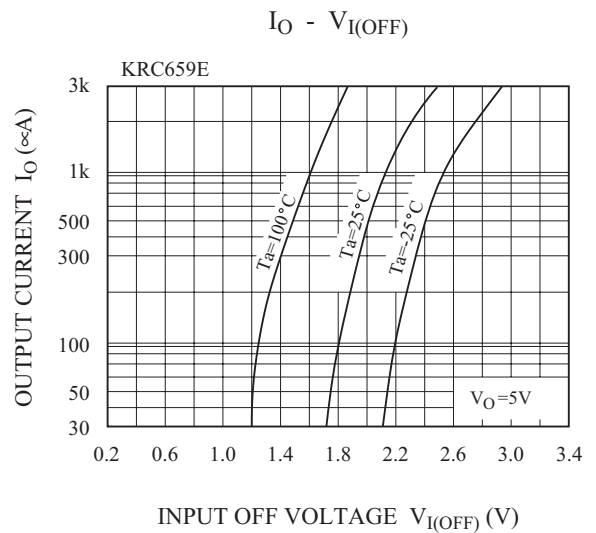
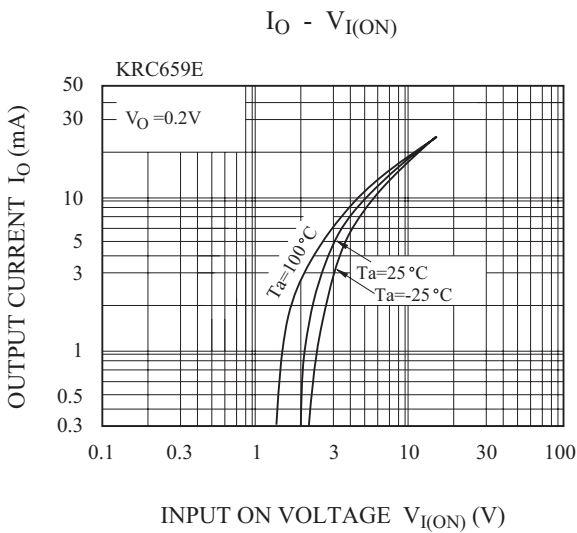
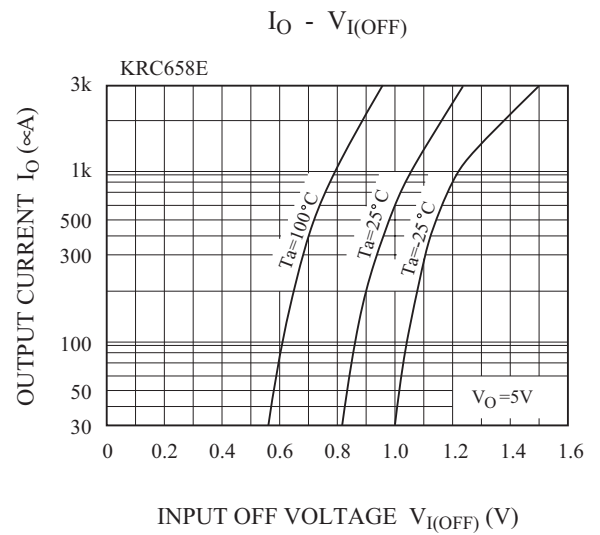
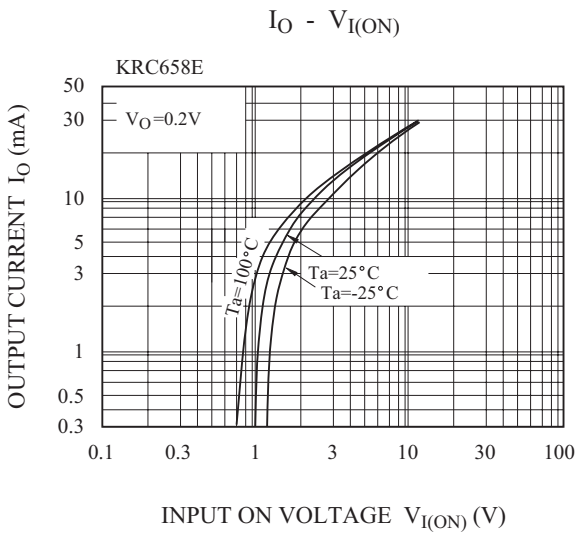
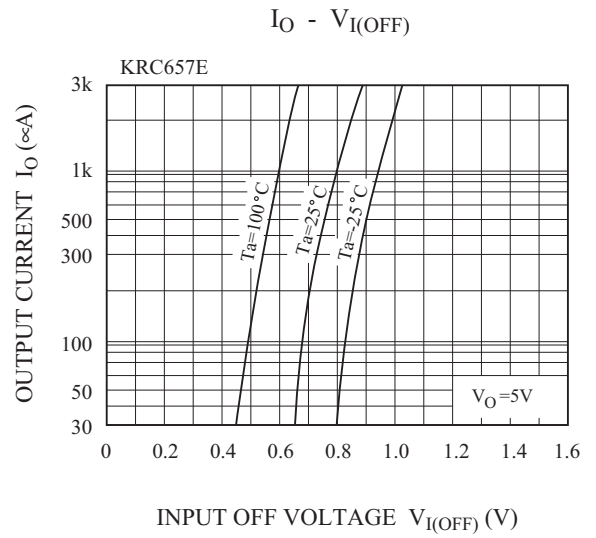
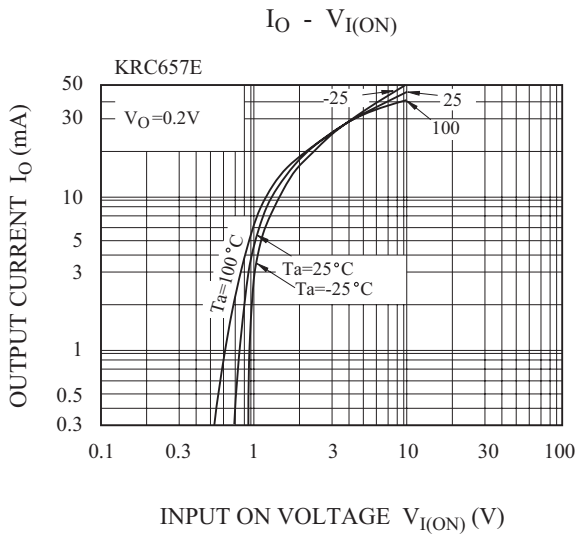
KRC657E~KRC659E

ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Cut-off Current		KRC657E 659E	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC657E		G_I	$V_O=5V, I_O=10mA$	80	150	-	
	KRC658E				80	150	-	
	KRC659E				70	140	-	
Output Voltage		KRC657E 659E	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC657E		$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.2	1.8	V
	KRC658E				-	1.8	2.6	
	KRC659E				-	3.0	5.8	
Input Voltage (OFF)	KRC657E		$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.5	0.75	-	V
	KRC658E				0.6	0.88	-	
	KRC659E				1.5	1.82	-	
Transition Frequency		KRC657E 659E	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	KRC657E		I_I	$V_I=5V$	-	-	0.88	mA
	KRC658E				-	-	0.36	
	KRC659E				-	-	0.16	
Switching Time	Rise Time	KRC657E	t_r	$V_O=5V, V_{IN}=5V$ $R_L=1k$	-	0.05	-	μs
		KRC658E			-	0.12	-	
		KRC659E			-	0.26	-	
	Storage Time	KRC657E	t_{stg}		-	2.0	-	
		KRC658E			-	2.4	-	
		KRC659E			-	1.5	-	
	Fall Time	KRC657E	t_f		-	0.36	-	
		KRC658E			-	0.4	-	
		KRC659E			-	0.41	-	
Input Resistor		KRC657E	R1	-	7	10	13	k
		KRC658E			15.4	22	28.6	
		KRC659E			32.9	47	61.1	
Resistor Ratio		KRC657E	R2/R1	-	3.7	4.7	5.7	
		KRC658E			1.7	2.1	26	
		KRC659E			0.37	0.47	0.57	

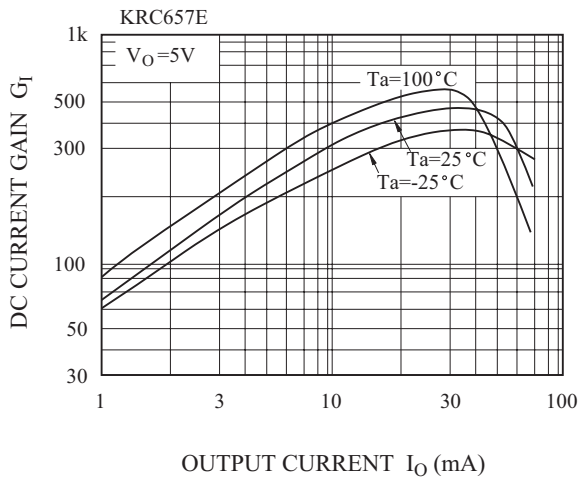
Note : * Characteristic of Transistor Only.

KRC657E~KRC659E

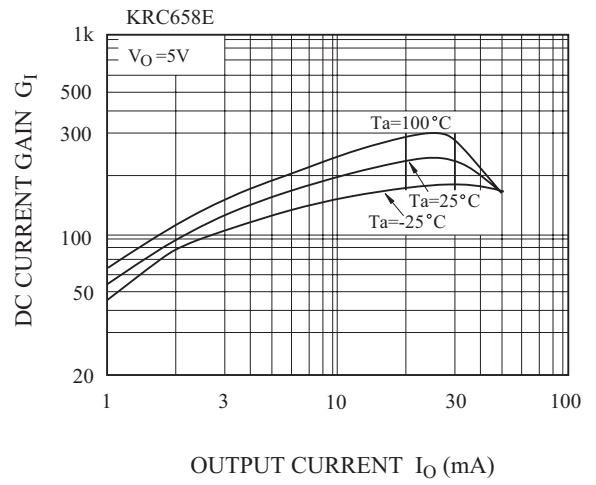


KRC657E~KRC659E

$G_I - I_O$



$G_I - I_O$



$G_I - I_O$

