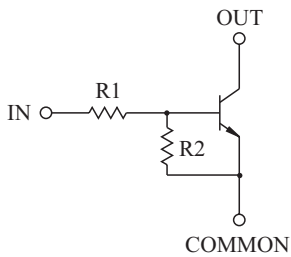


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

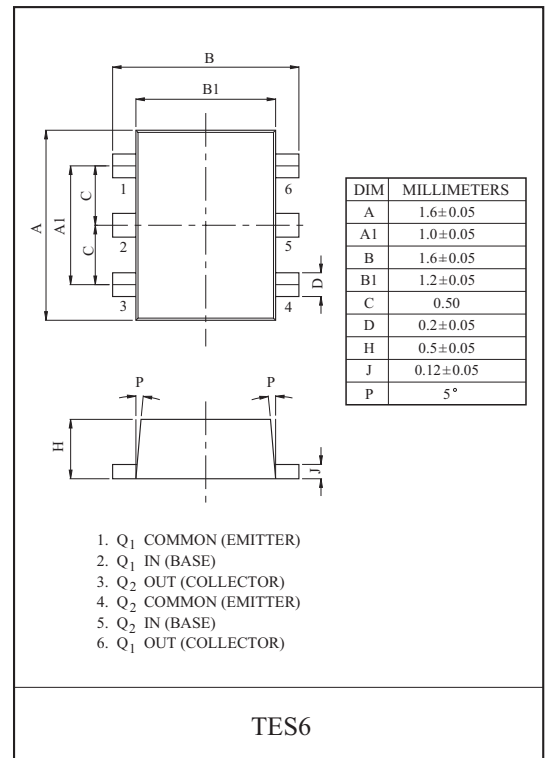
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

EQUIVALENT CIRCUIT

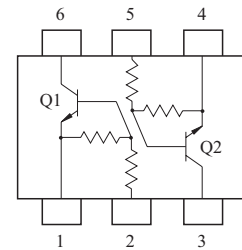


BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC857E	10	47
KRC858E	22	47
KRC859E	47	22



EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25 °C)

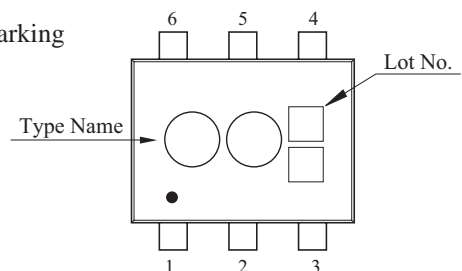
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC857E ~859E	V _O	50	V
Input Voltage	KRC857E	V _I	30, -6	V
	KRC858E		40, -7	
	KRC859E		40, -15	
Output Current	KRC857E ~859E	I _O	100	mA
Power Dissipation		P _D *	200	mW
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55 ~150	°C

* Total Rating.

MARK SPEC

TYPE	KRC857E	KRC858E	KRC859E
MARK	NH	NI	NJ

Marking



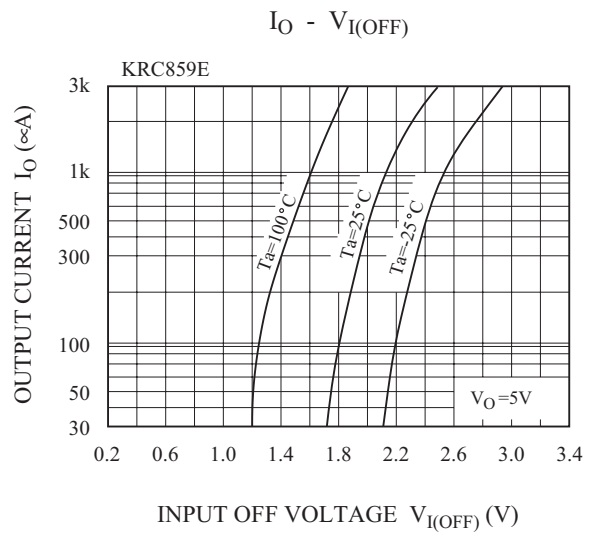
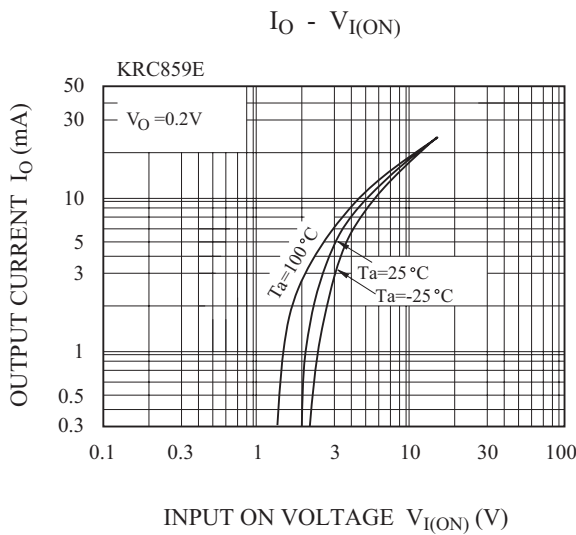
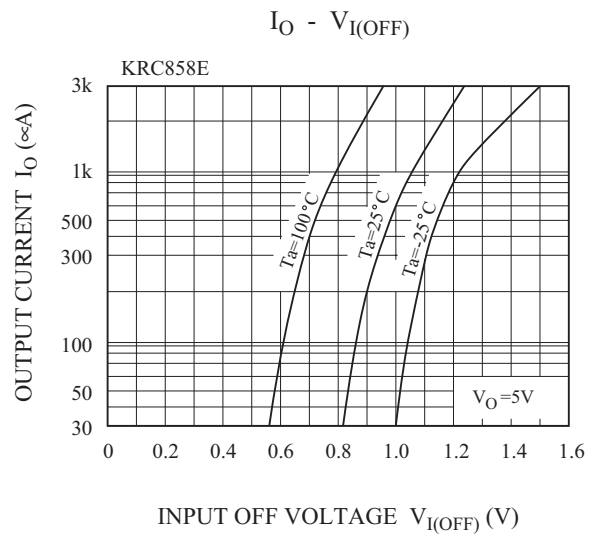
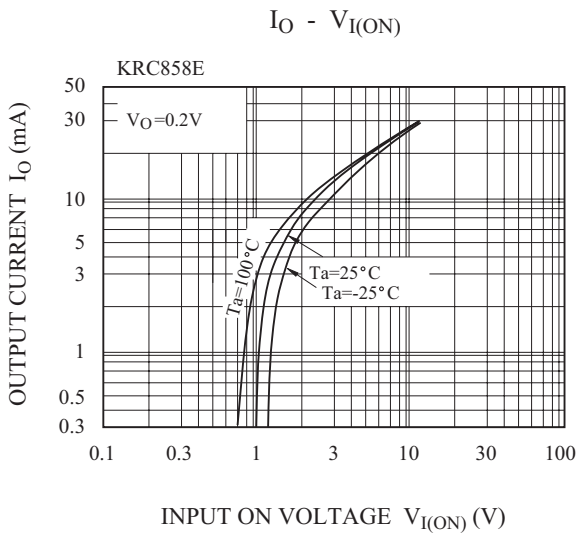
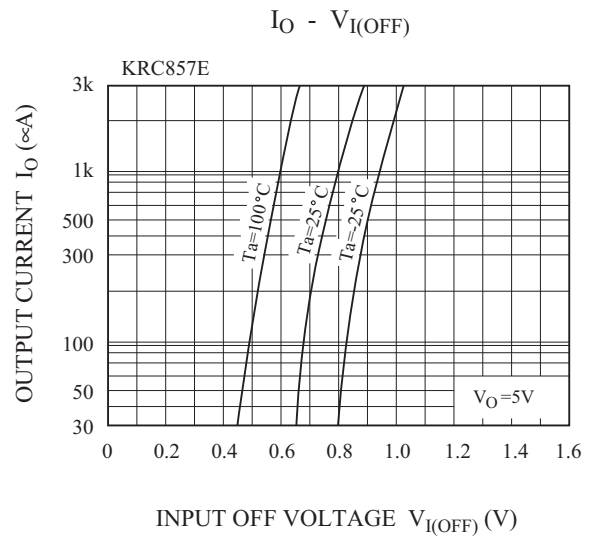
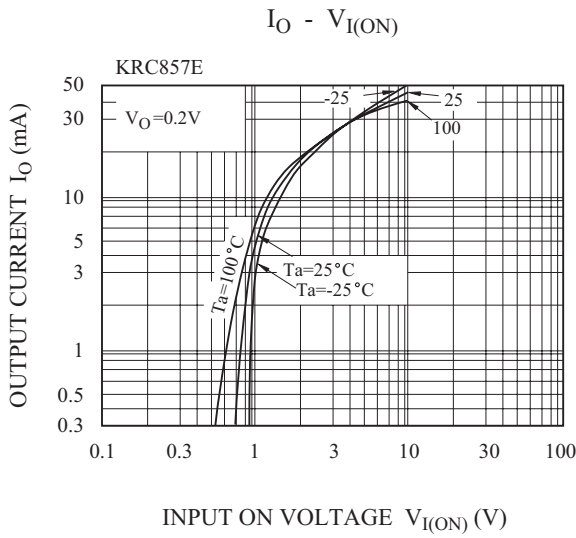
KRC857E~KRC859E

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Cut-off Current	KRC857E ~859E	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA	
DC Current Gain	KRC857E	G_I	$V_O=5V, I_O=10mA$	80	150	-		
	KRC858E			80	150	-		
	KRC859E			70	140	-		
Output Voltage	KRC857E ~859E	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V	
Input Voltage (ON)	KRC857E	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.2	1.8	V	
	KRC858E			-	1.8	2.6		
	KRC859E			-	3.0	5.8		
Input Voltage (OFF)	KRC857E	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.5	0.75	-	V	
	KRC858E			0.6	0.88	-		
	KRC859E			1.5	1.82	-		
Transition Frequency	KRC857E ~859E	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz	
Input Current	KRC857E	I_I	$V_I=5V$	-	-	0.88	mA	
	KRC858E			-	-	0.36		
	KRC859E			-	-	0.16		
Switching Time	Rise Time	t_r	$V_O=5V, V_{IN}=5V$ $R_L=1k \Omega$	-	0.05	-	μS	
				KRC858E	-	0.12		-
				KRC859E	-	0.26		-
	Storage Time	t_{stg}		KRC857E	-	2.0		-
				KRC858E	-	2.4		-
				KRC859E	-	1.5		-
	Fall Time	t_f		KRC857E	-	0.36		-
				KRC858E	-	0.4		-
				KRC859E	-	0.41		-

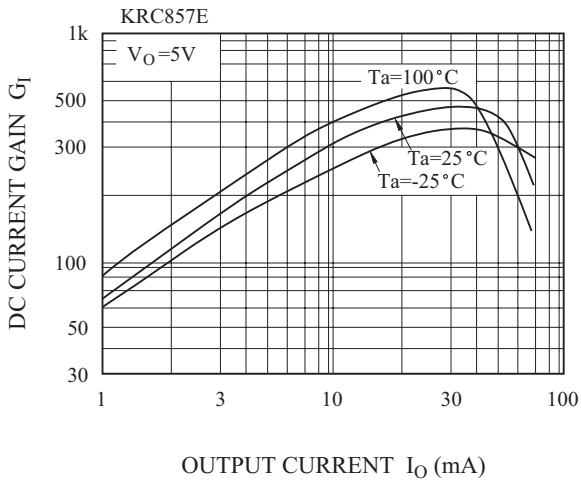
Note : * Characteristic of Transistor Only.

KRC857E~KRC859E

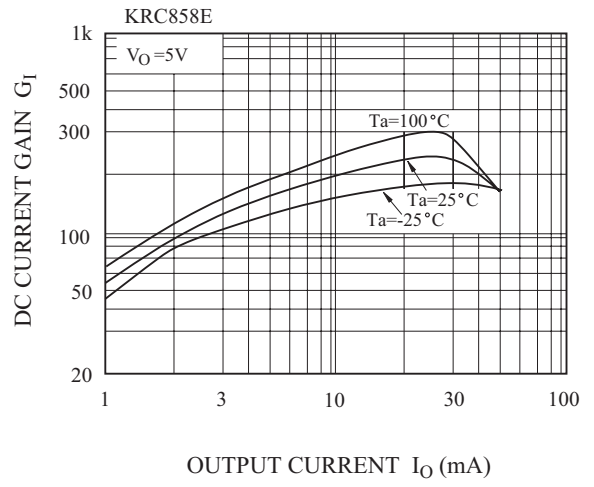


KRC857E~KRC859E

$G_I - I_O$



$G_I - I_O$



$G_I - I_O$

