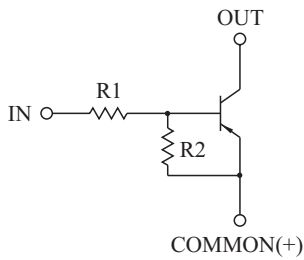


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

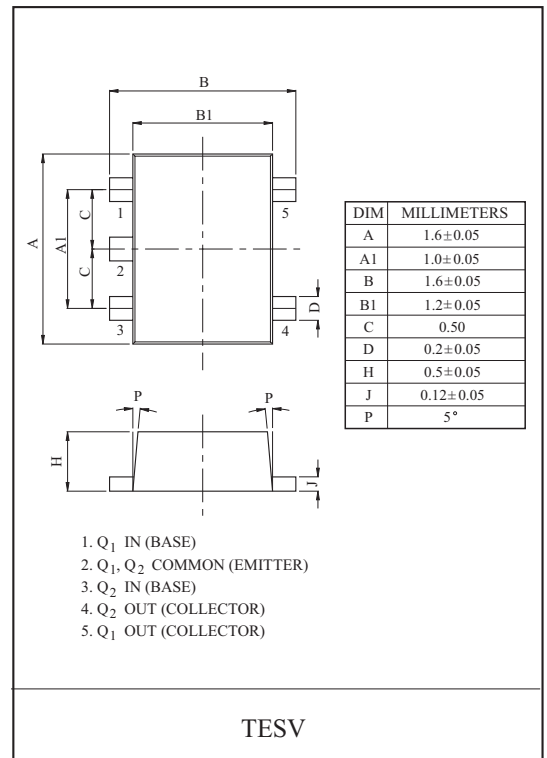
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- High Packing Density.

### EQUIVALENT CIRCUIT

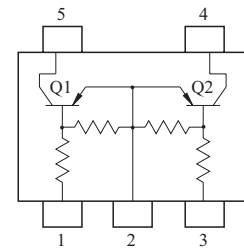


### BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRA557E	10	47
KRA558E	22	47
KRA559E	47	22



### EQUIVALENT CIRCUIT (TOP VIEW)



### MAXIMUM RATING (Ta=25 °C)

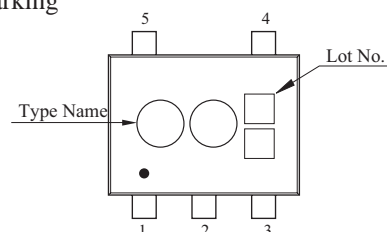
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA557E ~ 559E	V <sub>O</sub>	-50	V
Input Voltage	KRA557E	V <sub>I</sub>	-30, 6	V
	KRA558E		-40, 7	
	KRA559E		-40, 15	
Output Current	KRA557E ~ 559E	I <sub>O</sub>	-100	mA
Power Dissipation		P <sub>D</sub> *	200	mW
Junction Temperature		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	-55 ~ 150	°C

\* Total Rating.

### MARK SPEC

TYPE	KRA557E	KRA558E	KRA559E
MARK	PH	PI	PJ

### Marking



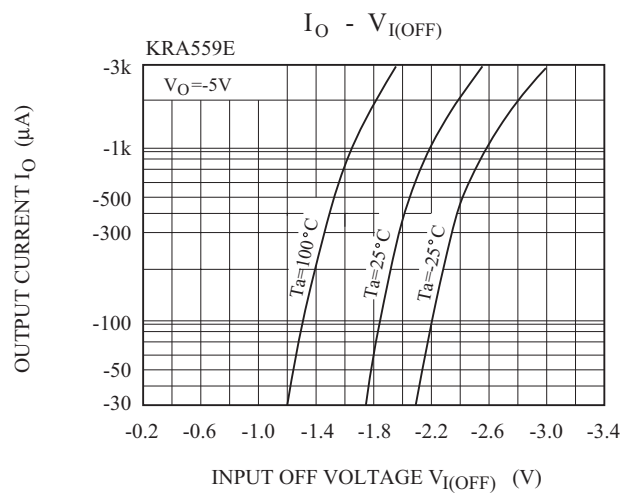
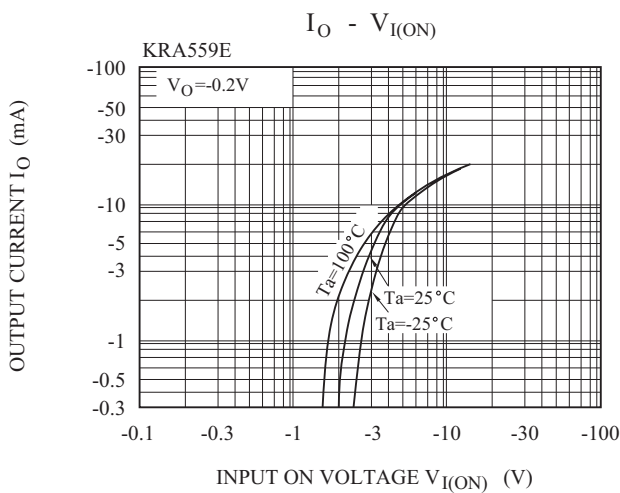
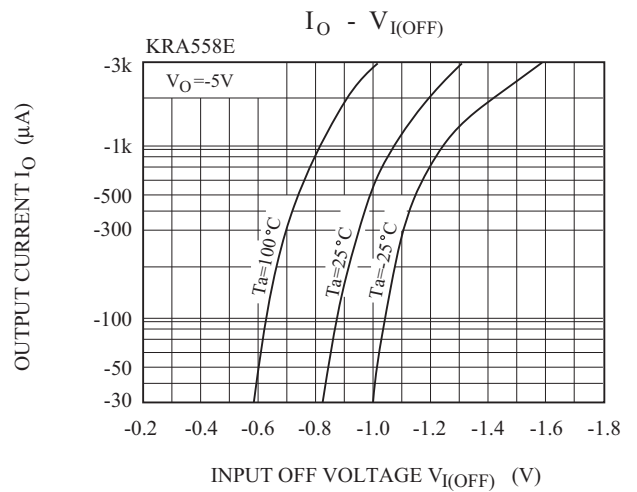
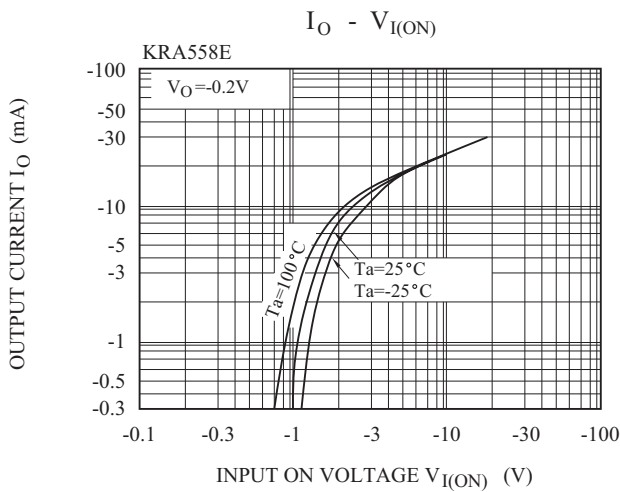
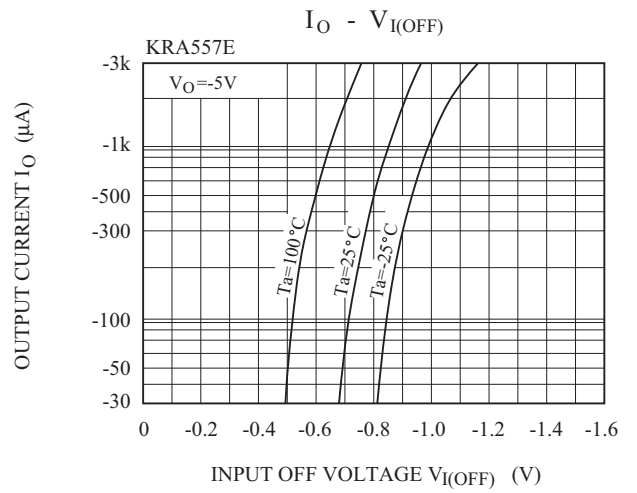
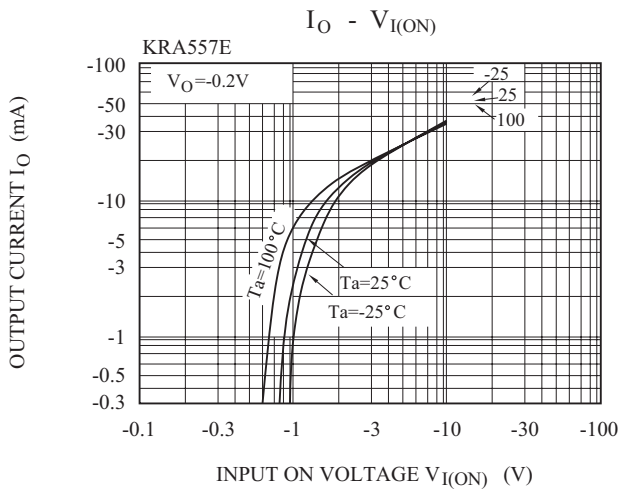
# KRA557E~KRA559E

## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Output Cut-off Current		KRA557E~559E	$I_{O(OFF)}$	$V_O=-50V, V_I=0$	-	-	-500	nA	
DC Current Gain	KRA557E	$G_I$	$V_O=-5V, I_O=-10mA$	80	150	-			
	KRA558E			80	150	-			
	KRA559E			70	140	-			
Output Voltage		KRA557E~559E	$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V	
Input Voltage (ON)	KRA557E	$V_{I(ON)}$	$V_O=-0.2V, I_O=-5mA$	-	-1.2	-1.8	V		
	KRA558E			-	-1.8	-2.6			
	KRA559E			-	-3.0	-5.8			
Input Voltage (OFF)	KRA557E	$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-0.5	-0.75	-	V		
	KRA558E			-0.6	-0.88	-			
	KRA559E			-1.5	-1.82	-			
Transition Frequency		KRA557E~559E	$f_T^*$	$V_O=-10V, I_O=-5mA$	-	200	-	MHz	
Input Current	KRA557E	$I_I$	$V_I=-5V$	-	-	-0.88	mA		
	KRA558E			-	-	-0.36			
	KRA559E			-	-	-0.16			
Switching Time	Rise Time	KRA557E	$t_r$	$V_O=-5V, V_{IN}=-5V$ $R_L=1k \Omega$	-	0.07	-	$\mu S$	
		KRA558E			-	0.20	-		
		KRA559E			-	0.38	-		
	Storage Time	KRA557E			$t_{stg}$	-	1.1		-
		KRA558E				-	1.3		-
		KRA559E				-	0.7		-
	Fall Time	KRA557E			$t_f$	-	0.35		-
		KRA558E				-	0.4		-
		KRA559E				-	0.48		-

Note : \* Characteristic of Transistor Only.

# KRA557E~KRA559E



# KRA557E~KRA559E

