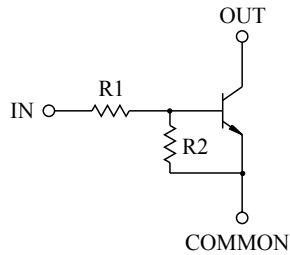


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

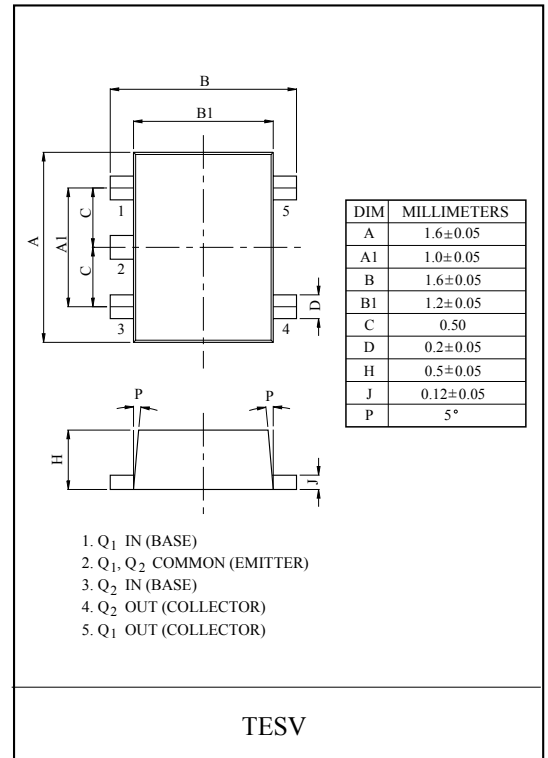
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

### EQUIVALENT CIRCUIT

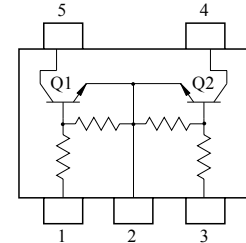


### BIAS RESISTOR VALUES

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



### EQUIVALENT CIRCUIT (TOP VIEW)



### MAXIMUM RATING (Ta=25°C)

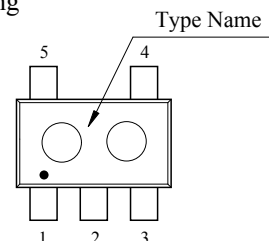
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC657E ~ 659E	$V_O$	50	V
Input Voltage	KRC657E	$V_i$	30, -6	V
	KRC658E		40, -7	
	KRC659E		40, -15	
Output Current	KRC657E ~ 659E	$I_O$	100	mA
Power Dissipation		$P_D^*$	200	mW
Junction Temperature		$T_j$	150	°C
Storage Temperature Range		$T_{stg}$	-55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

\* Total Rating.

### Marking

### MARK SPEC

TYPE	KRC657E	KRC658E	KRC659E
MARK	NH	NI	NJ



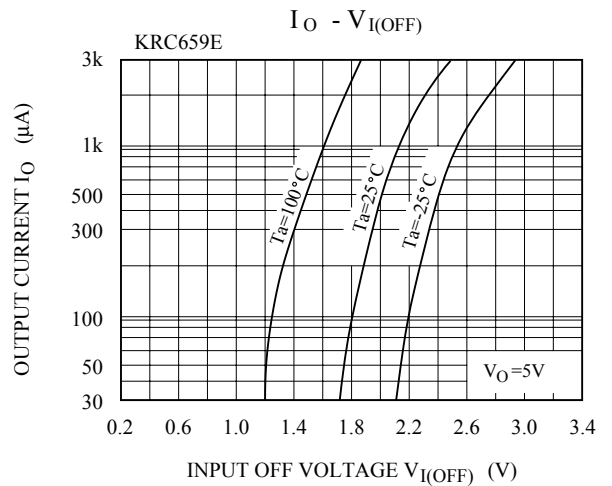
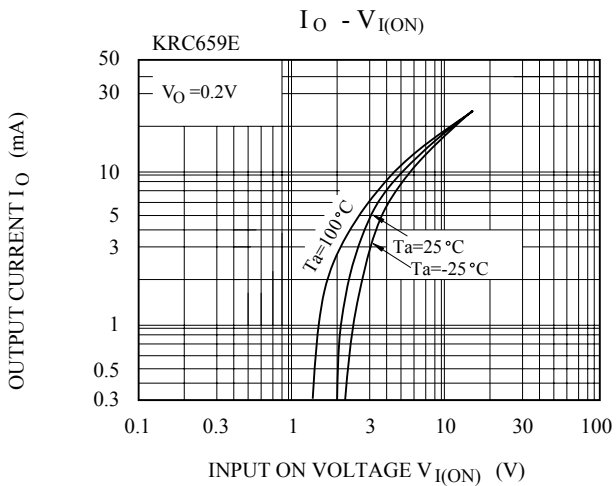
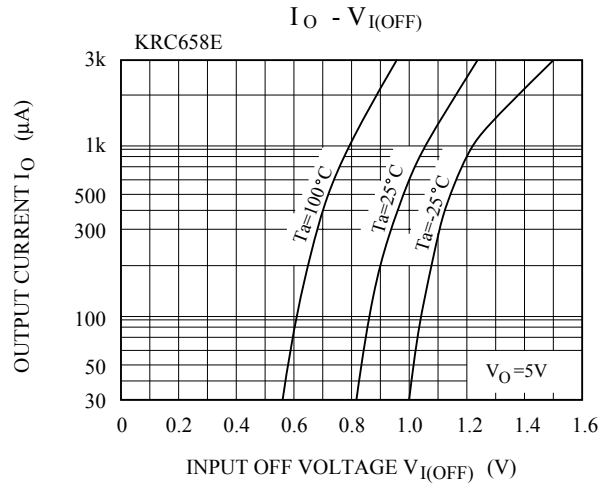
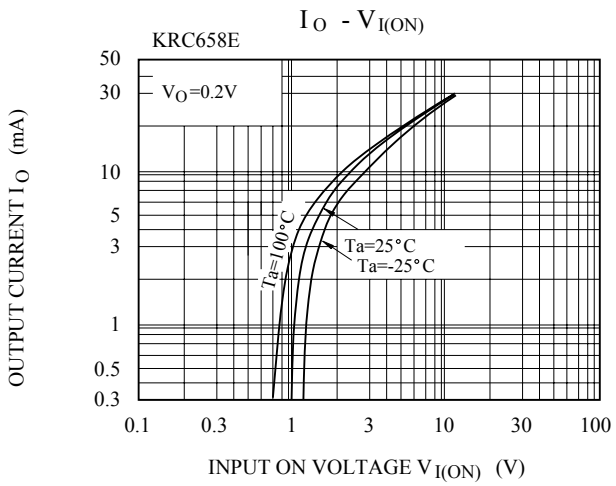
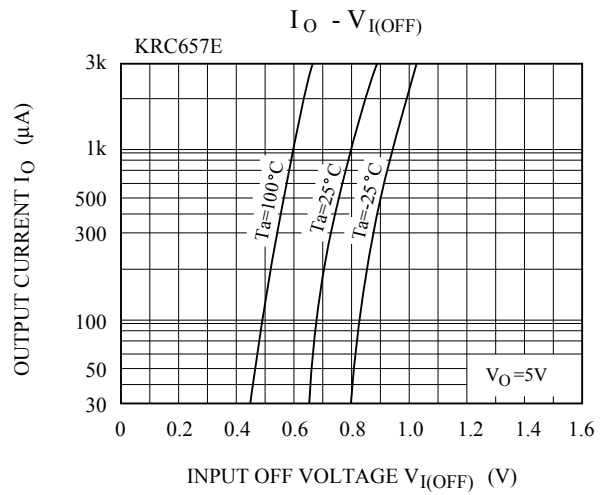
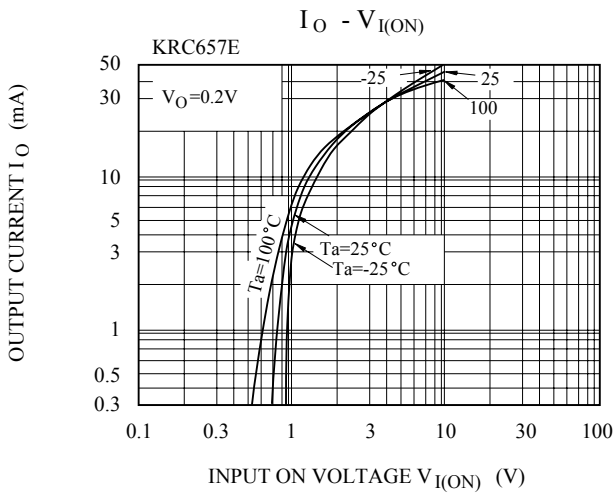
# KRC657E~KRC659E

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

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	$t_r$	$V_O=5V, V_{IN}=5V$ $R_L=1k\Omega$	-	0.05	-	$\mu S$	
				KRC658E	-	0.12		-
				KRC659E	-	0.26		-
	Storage Time	$t_{stg}$		KRC657E	-	2.0		-
				KRC658E	-	2.4		-
				KRC659E	-	1.5		-
	Fall Time	$t_f$		KRC657E	-	0.36		-
				KRC658E	-	0.4		-
				KRC659E	-	0.41		-

Note : \* Characteristic of Transistor Only.

# KRC657E~KRC659E



# KRC657E~KRC659E

