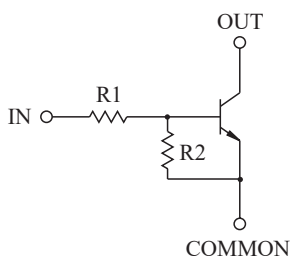


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

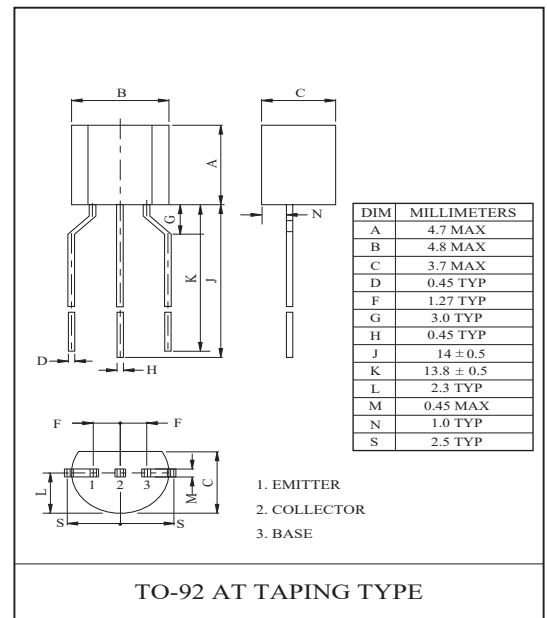
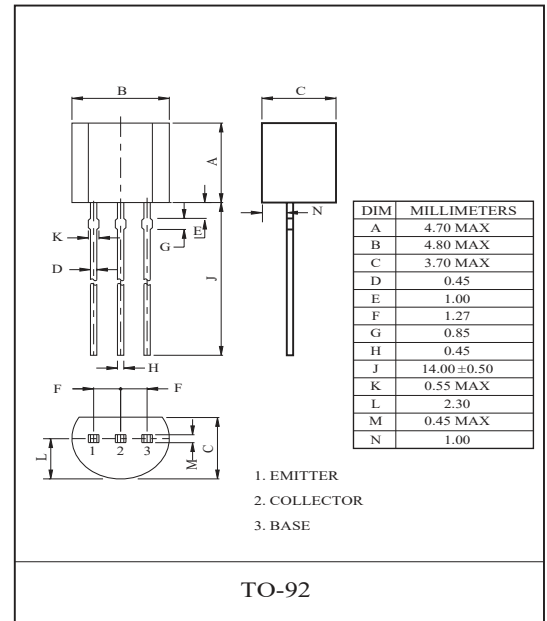
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

TYPE NO.	R1(k $\Omega$ )	R2(k $\Omega$ )
KRC107	10	47
KRC108	22	47
KRC109	47	22



### MAXIMUM RATING (Ta=25 $^{\circ}$ C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC107~109	V <sub>O</sub>	50	V
Input Voltage	KRC107	V <sub>I</sub>	30, -6	V
	KRC108		40, -7	
	KRC109		40, -15	
Output Current	KRC107~109	I <sub>O</sub>	100	mA
Power Dissipation		P <sub>D</sub>	625	mW
Junction Temperature		T <sub>j</sub>	-55~150	$^{\circ}$ C
Storage Temperature Range		T <sub>stg</sub>	-55~150	$^{\circ}$ C

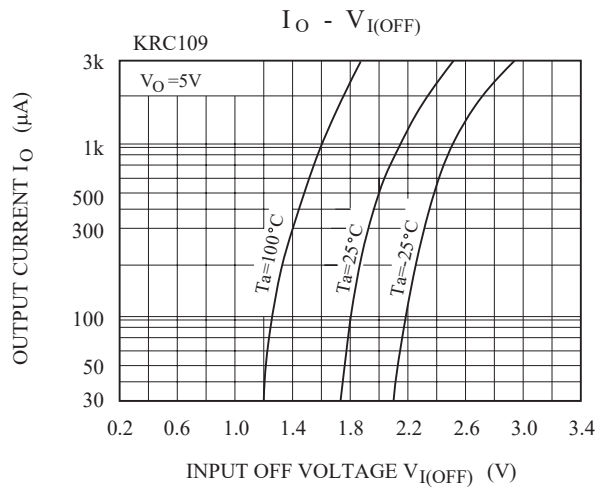
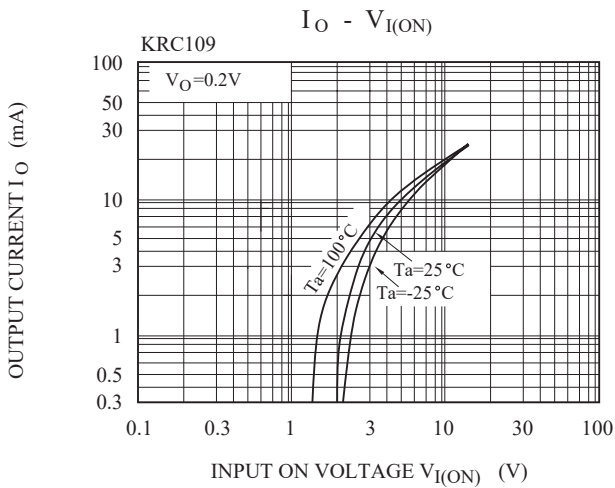
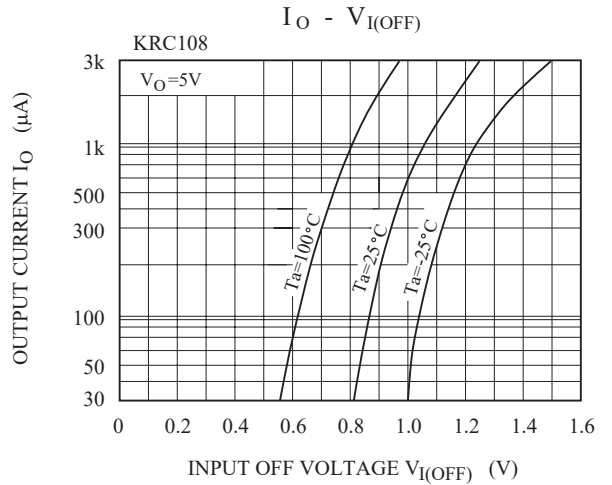
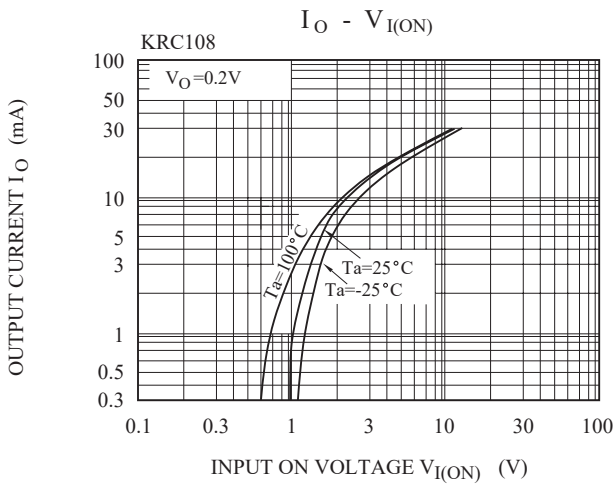
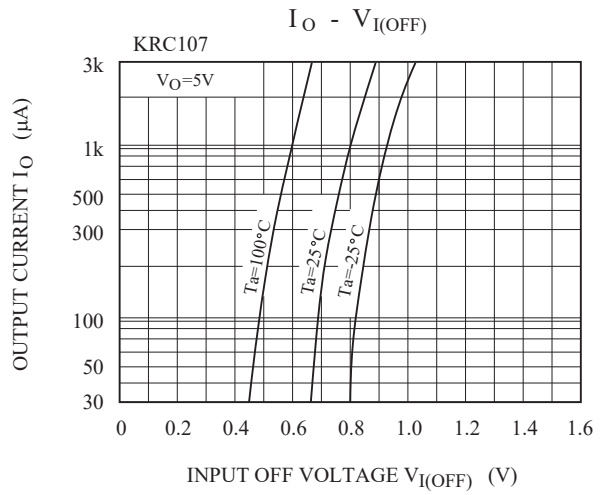
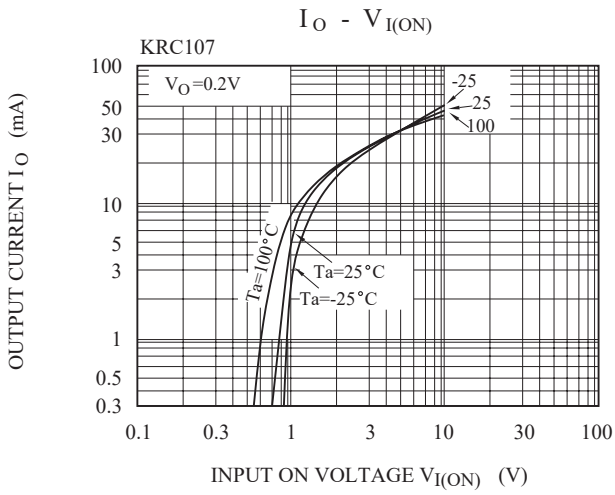
# KRC107~KRC109

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Output Cut-off Current		KRC107~109	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA	
DC Current Gain	KRC107	$G_I$	$V_O=5V, I_O=10mA$	80	150	-			
	KRC108			80	150	-			
	KRC109			70	140	-			
Output Voltage		KRC107~109	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V	
Input Voltage (ON)	KRC107	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.2	1.8	V		
	KRC108			-	1.8	2.6			
	KRC109			-	3.0	5.8			
Input Voltage (OFF)	KRC107	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.5	0.75	-	V		
	KRC108			0.6	0.88	-			
	KRC109			1.5	1.82	-			
Transition Frequency		KRC107~109	$f_T^*$	$V_O=10V, I_O=5mA$	-	200	-	MHz	
Input Current	KRC107	$I_I$	$V_I=5V$	-	-	0.88	mA		
	KRC108			-	-	0.36			
	KRC109			-	-	0.16			
Input Resistor	KRC107	R1	-	7	10	13	kΩ		
	KRC108			15.4	22	28.6			
	KRC109			32.9	47	61.1			
Input Resistor	KRC107	R2	-	32.9	47	61.1	kΩ		
	KRC108			32.9	47	61.1			
	KRC109			15.4	22	28.6			
Switching Time	Rise Time	KRC107	$t_r$	$V_O=5V, V_{IN}=5V$ $R_L=1k\Omega$	-	0.05	-	$\mu S$	
		KRC108			-	0.12	-		
		KRC109			-	0.26	-		
	Storage Time	KRC107			$t_{stg}$	-	2.0		-
		KRC108				-	2.4		-
		KRC109				-	1.5		-
	Fall Time	KRC107			$t_f$	-	0.36		-
		KRC108				-	0.4		-
		KRC109				-	0.41		-

Note : \* Characteristic of Transistor Only.

# KRC107~KRC109



# KRC107~KRC109

