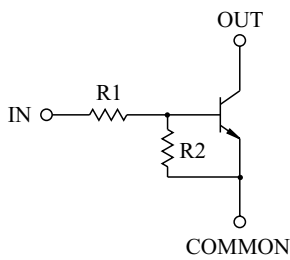


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

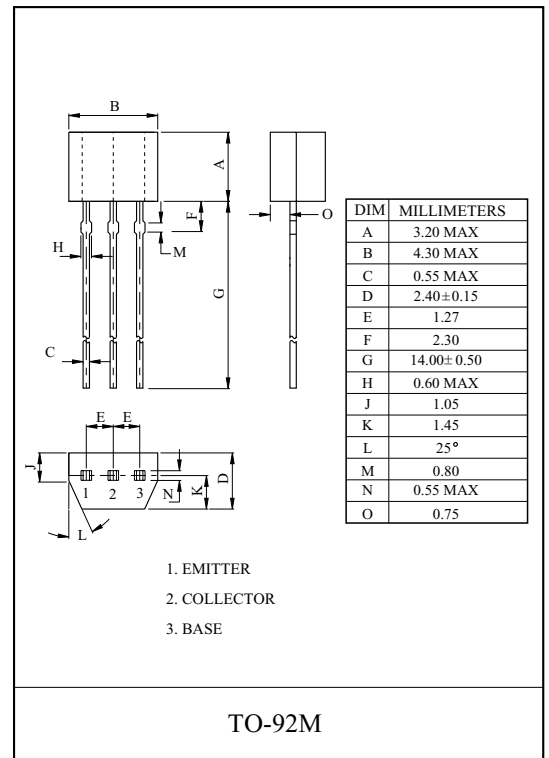
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

TYPE NO.	R1(k )	R2(k )
KRC107M	10	47
KRC108M	22	47
KRC109M	47	22



### MAXIMUM RATING (Ta=25 )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC107M 109M	V <sub>O</sub>	50	V
Input Voltage	KRC107M	V <sub>I</sub>	30, -6	V
	KRC108M		40, -7	
	KRC109M		40, -15	
Output Current	KRC107M 109M	I <sub>O</sub>	100	mA
Power Dissipation		P <sub>D</sub>	400	mW
Junction Temperature		T <sub>j</sub>	150	
Storage Temperature Range		T <sub>stg</sub>	-55 150	

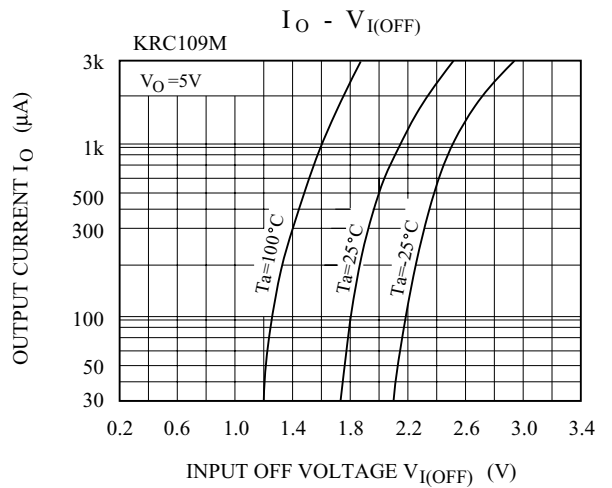
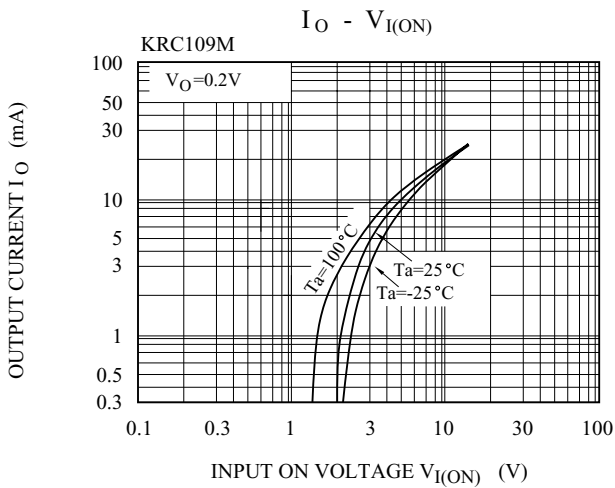
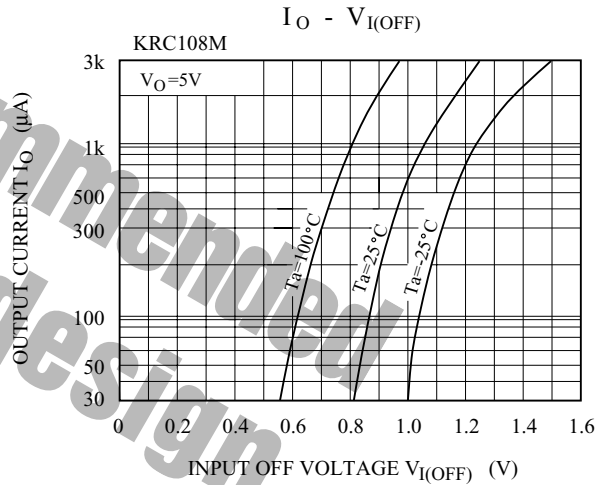
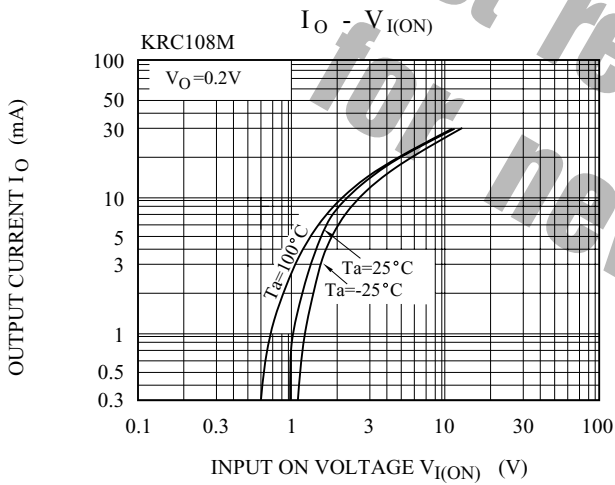
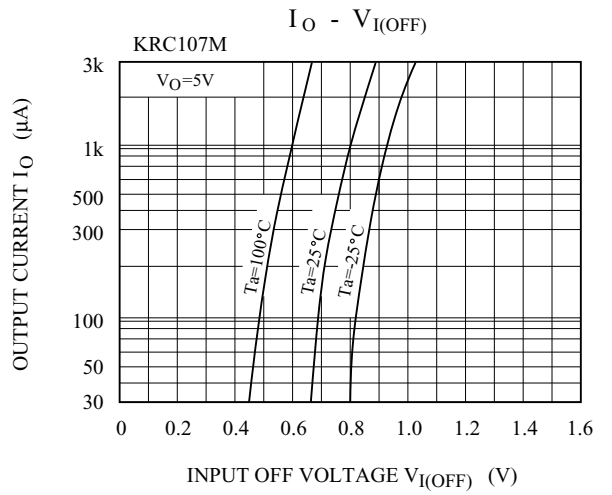
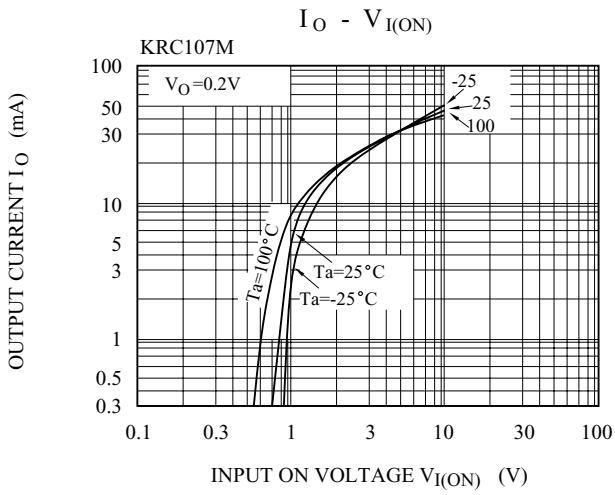
# KRC107M~KRC109M

## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

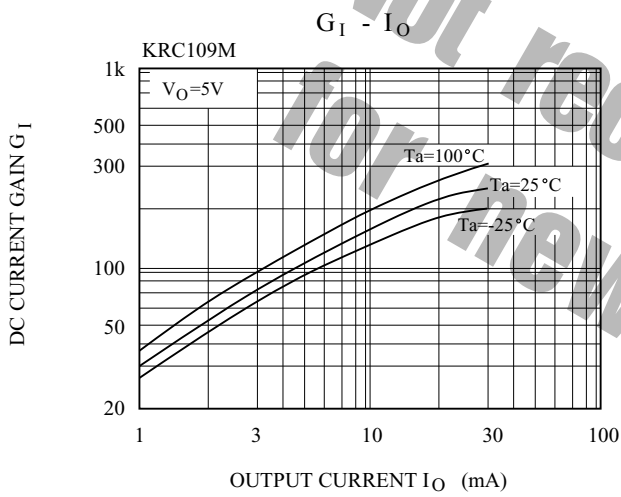
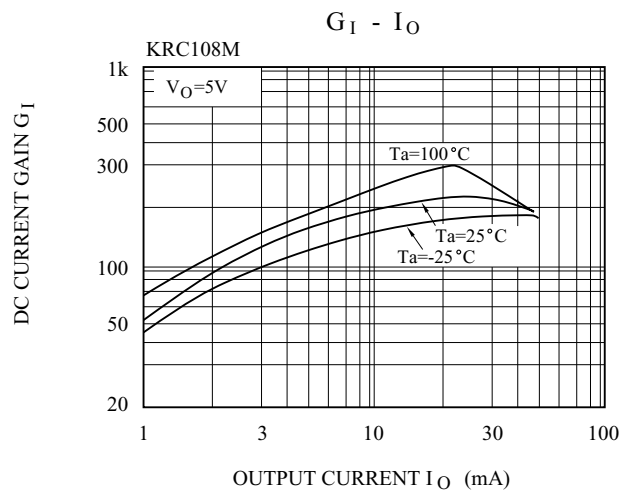
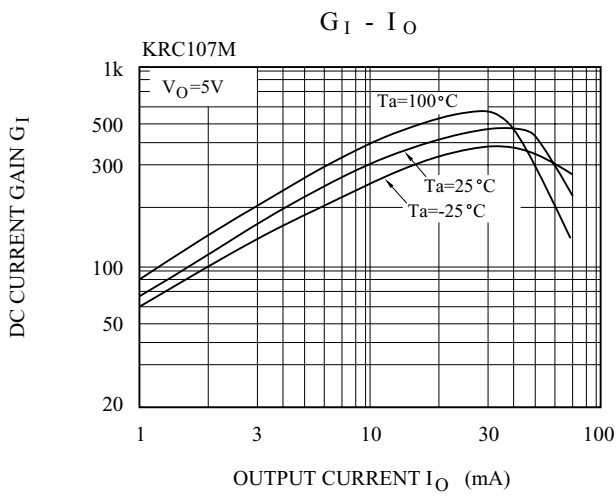
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Output Cut-off Current		KRC107M 109M	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA	
DC Current Gain	KRC107M		$G_I$	$V_O=5V, I_O=10mA$	80	150	-		
	KRC108M				80	150	-		
	KRC109M				70	140	-		
Output Voltage		KRC107M 109M	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V	
Input Voltage (ON)	KRC107M		$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.2	1.8	V	
	KRC108M				-	1.8	2.6		
	KRC109M				-	3.0	5.8		
Input Voltage (OFF)	KRC107M		$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.5	0.75	-	V	
	KRC108M				0.6	0.88	-		
	KRC109M				1.5	1.82	-		
Transition Frequency		KRC107M 109M	$f_T^*$	$V_O=10V, I_O=5mA$	-	200	-	MHz	
Input Current	KRC107M		$I_I$	$V_I=5V$	-	-	0.88	mA	
	KRC108M				-	-	0.36		
	KRC109M				-	-	0.16		
Switching Time	Rise Time	KRC107M	$t_r$	$V_O=5V, V_{IN}=5V$ $R_L=1k$	-	0.05	-	$\mu s$	
		KRC108M			-	0.12	-		
		KRC109M			-	0.26	-		
	Storage Time	KRC107M			-	2.0	-		
		KRC108M			-	2.4	-		
		KRC109M			-	1.5	-		
	Fall Time	KRC107M			$t_f$	-	0.36		-
		KRC108M				-	0.4		-
		KRC109M				-	0.41		-
Input Resistor	KRA107S		R1	-	7	10	13	k	
	KRA108S				15.4	22	28.6		
	KRA109S				32.9	47	61.1		
Resistor Ratio	KRA107S		R2/R1	-	3.7	4.7	5.7		
	KRA108S				1.7	2.1	2.6		
	KRA109S				0.37	0.47	0.57		

Note : \* Characteristic of Transistor Only.

# KRC107M~KRC109M



# KRC107M~KRC109M



Not recommended for new design