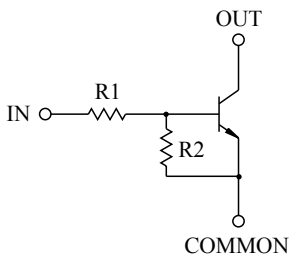


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

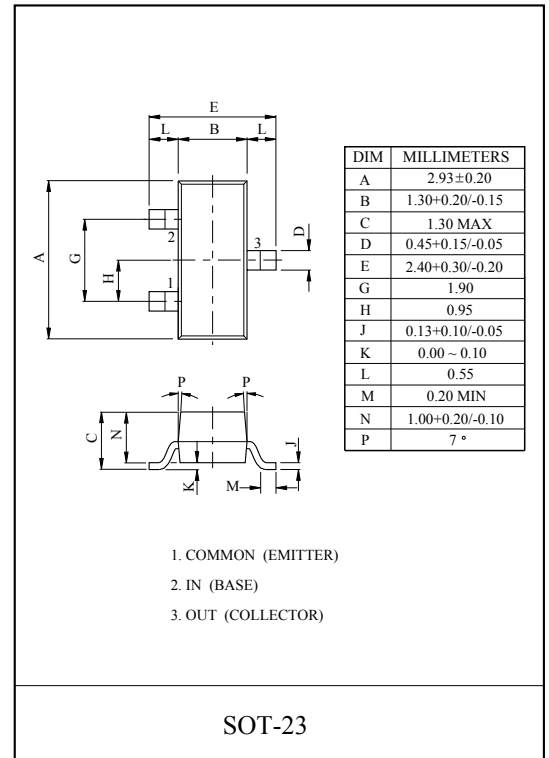
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(kΩ)	R2(kΩ)
KRC107S	10	47
KRC108S	22	47
KRC109S	47	22



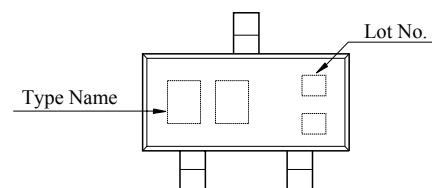
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC107S ~ 109S	V _O	50	V
Input Voltage	KRC107S	V _I	30, -6	V
	KRC108S		40, -7	
	KRC109S		40, -15	
Output Current	KRC107S ~ 109S	I _O	100	mA
Power Dissipation		P _D	200	mW
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55 ~ 150	°C

MARK SPEC

TYPE	KRC107S	KRC108S	KRC109S
MARK	NH	NI	NJ

Marking



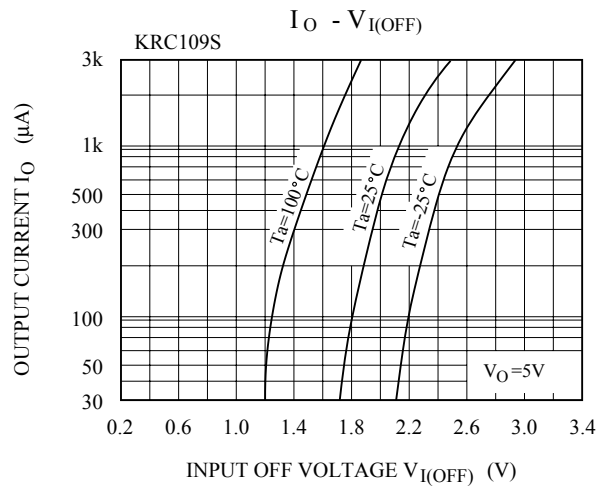
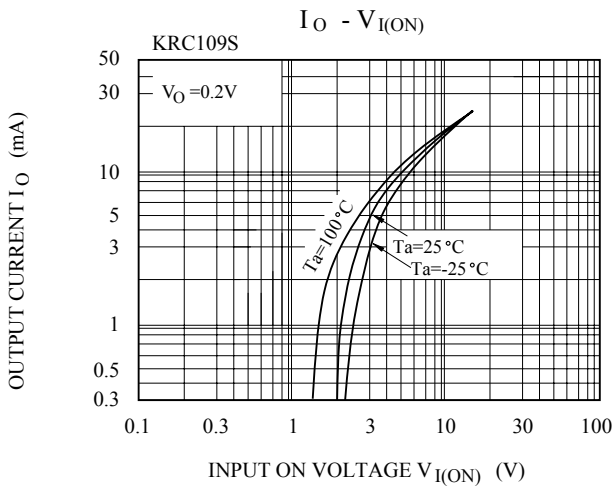
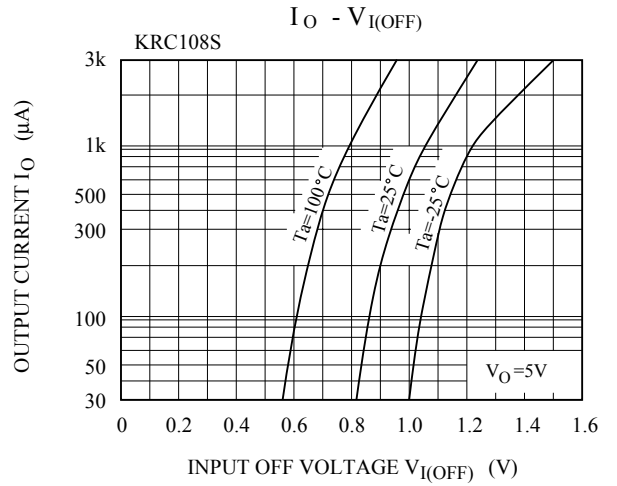
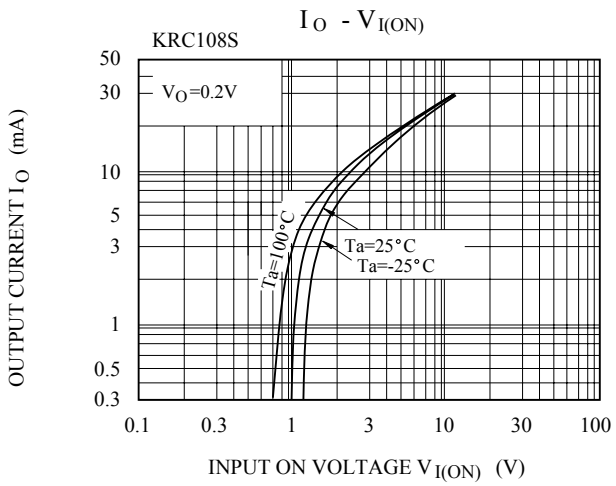
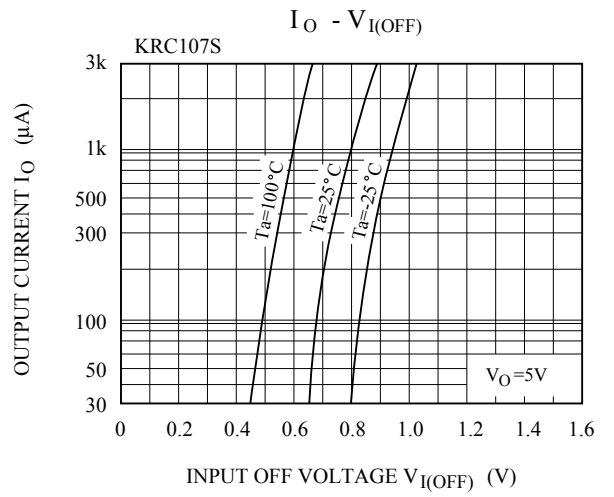
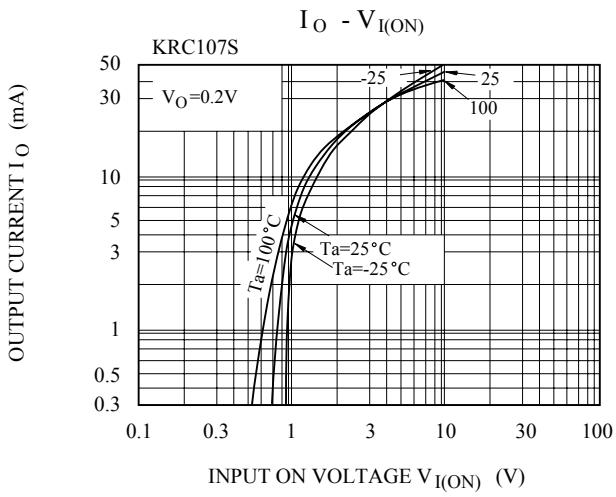
KRC107S~KRC109S

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Output Cut-off Current		KRC107S ~ 109S	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA	
DC Current Gain	KRC107S	G_I	$V_O=5V, I_O=10mA$	80	150	-			
	KRC108S			80	150	-			
	KRC109S			70	140	-			
Output Voltage		KRC107S ~ 109S	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V	
Input Voltage (ON)	KRC107S	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.2	1.8	V		
	KRC108S			-	1.8	2.6			
	KRC109S			-	3.0	5.8			
Input Voltage (OFF)	KRC107S	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.5	0.75	-	V		
	KRC108S			0.6	0.88	-			
	KRC109S			1.5	1.82	-			
Transition Frequency		KRC107S ~ 109S	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz	
Input Current	KRC107S	I_I	$V_I=5V$	-	-	0.88	mA		
	KRC108S			-	-	0.36			
	KRC109S			-	-	0.16			
Switching Time	Rise Time	KRC107S	t_r	$V_O=5V, V_{IN}=5V$ $R_L=1k\Omega$	-	0.05	-	μS	
		KRC108S			-	0.12	-		
		KRC109S			-	0.26	-		
	Storage Time	KRC107S			t_{stg}	-	2.0		-
		KRC108S				-	2.4		-
		KRC109S				-	1.5		-
	Fall Time	KRC107S			t_f	-	0.36		-
		KRC108S				-	0.4		-
		KRC109S				-	0.41		-

Note : * Characteristic of Transistor Only.

KRC107S~KRC109S



KRC107S~KRC109S

