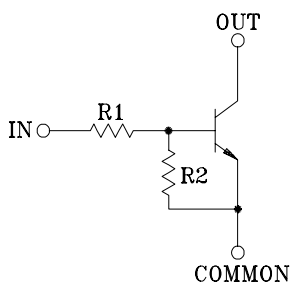


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

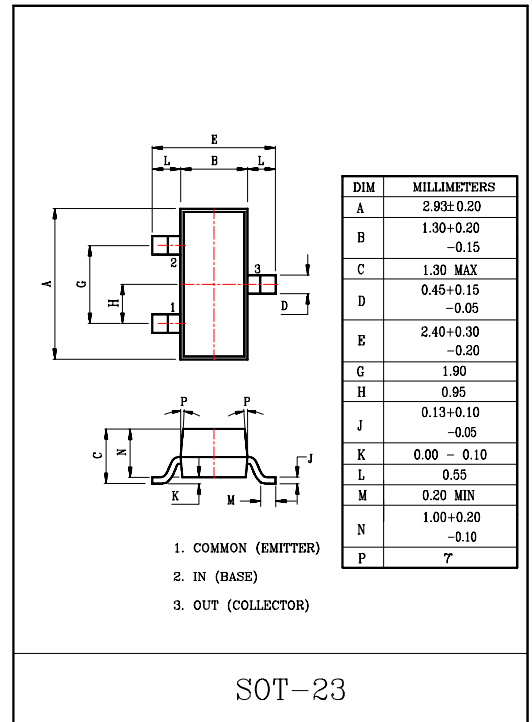
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

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



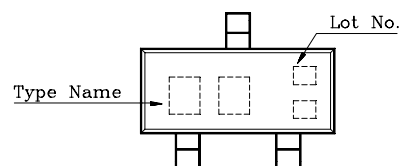
MAXIMUM RATINGS (Ta=25°C)

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



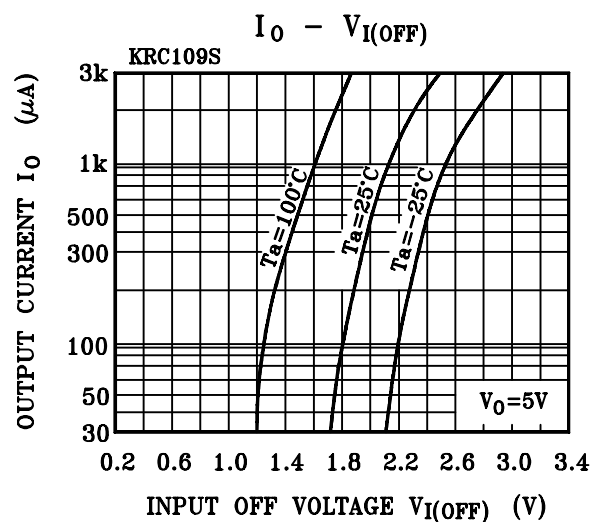
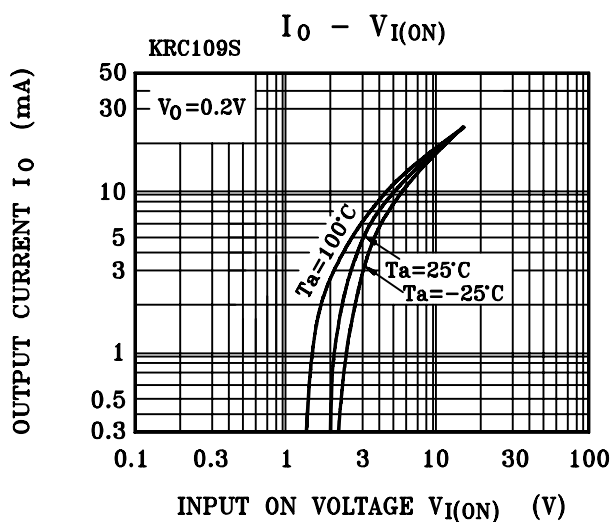
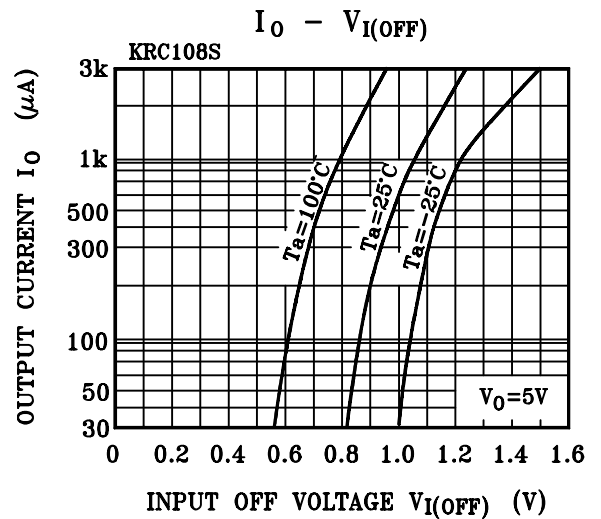
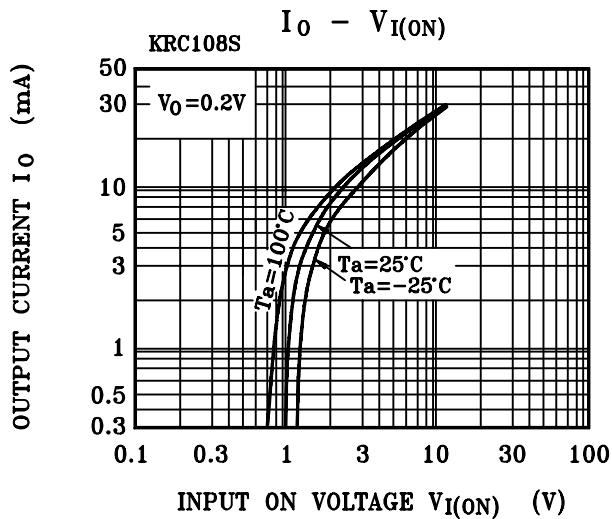
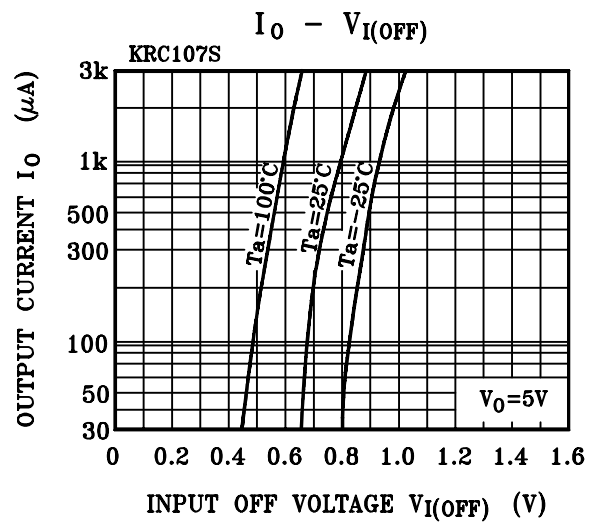
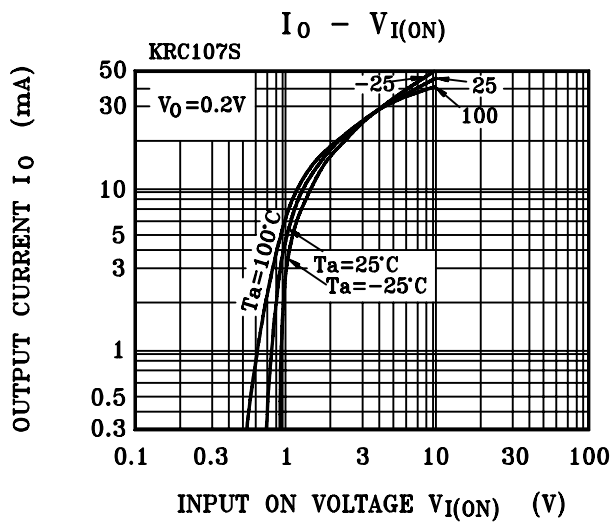
KRC107S ~ KRC109S

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	$V_O=5V, V_{IN}=5V$ $R_L=1k\Omega$	–	0.05	–	μS
		KRC108S		–	0.12	–	
		KRC109S		–	0.26	–	
	Storage Time	KRC107S		–	2.0	–	
		KRC108S		–	2.4	–	
		KRC109S		–	1.5	–	
	Fall Time	KRC107S		–	0.36	–	
		KRC108S		–	0.4	–	
		KRC109S		–	0.41	–	

Note : *Characteristic of Transistor Only

KRC107S ~ KRC109S



KRC107S ~ KRC109S

