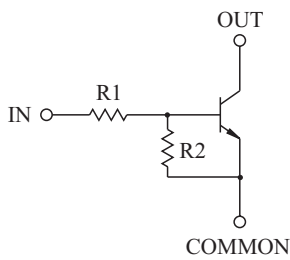


**SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.**

### FEATURES

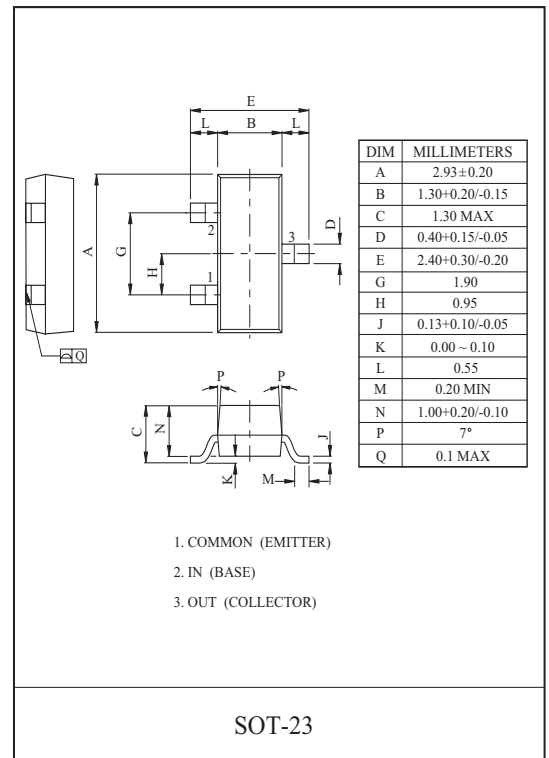
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- Suffix U : Qualified to AEC-Q101  
ex) KRC107S-RTK/HU

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

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



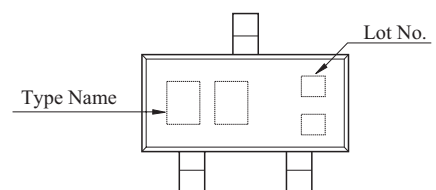
### MAXIMUM RATING (Ta=25 )

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	
Storage Temperature Range		$T_{stg}$	-55 150	

### MARK SPEC

TYPE	KRC107S	KRC108S	KRC109S
MARK	NH	NI	NJ

### Marking



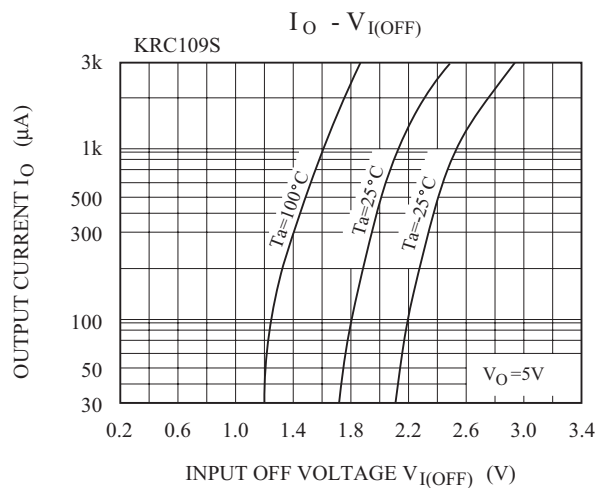
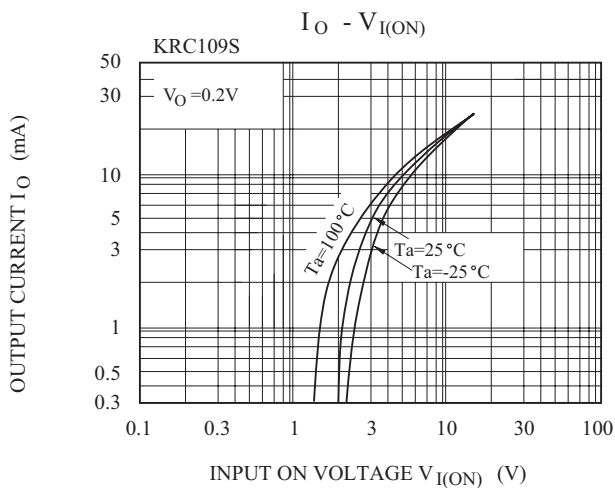
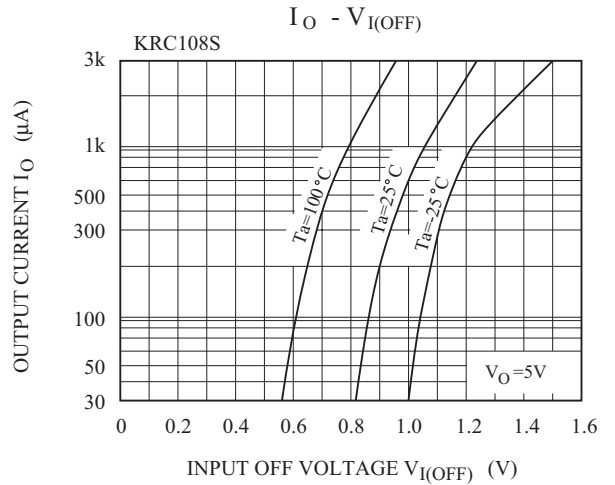
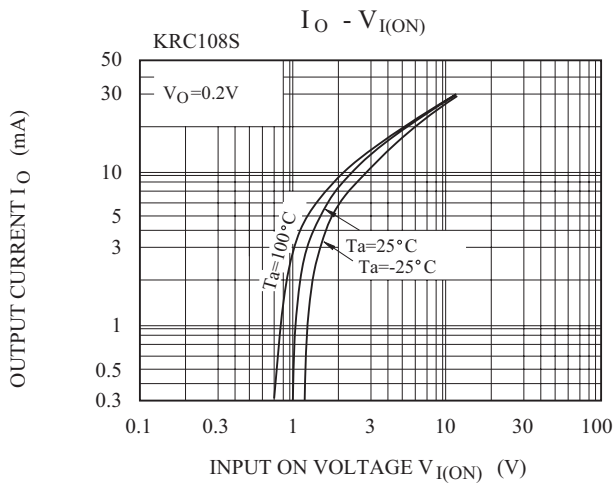
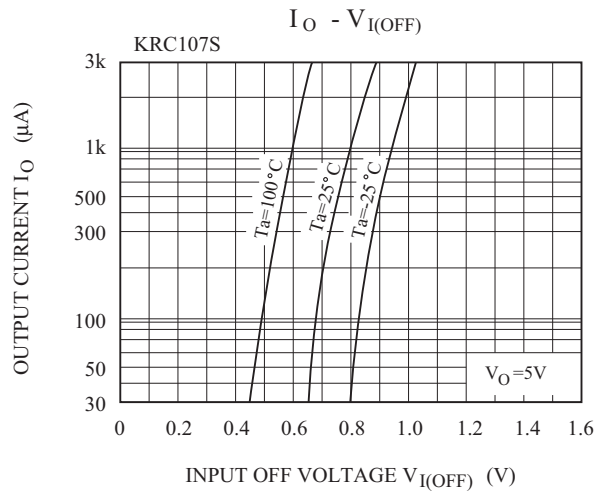
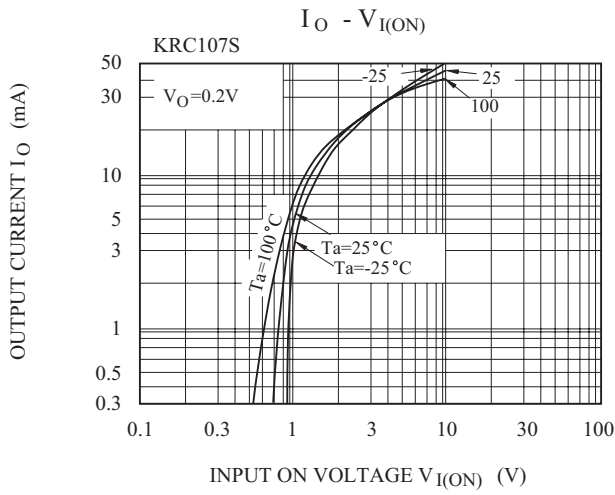
# KRC107S~KRC109S

## ELECTRICAL CHARACTERISTICS (Ta=25 )

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	$t_r$	$V_O=5V, V_{IN}=5V$ $R_L=1k$	-	0.05	-	$\mu s$
		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	-	
Input Resistor		KRC107S	R1	-	7	10	13	k
		KRC108S		15.4	22	28.6		
		KRC109S		32.9	47	61.1		
Resistor Ratio		KRC107S	R2/R1	-	3.7	4.7	5.7	
		KRC108S		1.7	2.1	2.6		
		KRC109S		0.37	0.47	0.57		

Note : \* Characteristic of Transistor Only.

# KRC107S~KRC109S



# KRC107S~KRC109S

