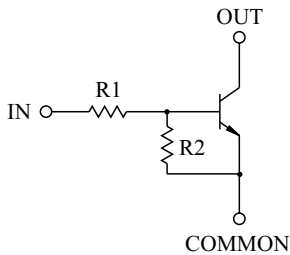


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

### FEATURES

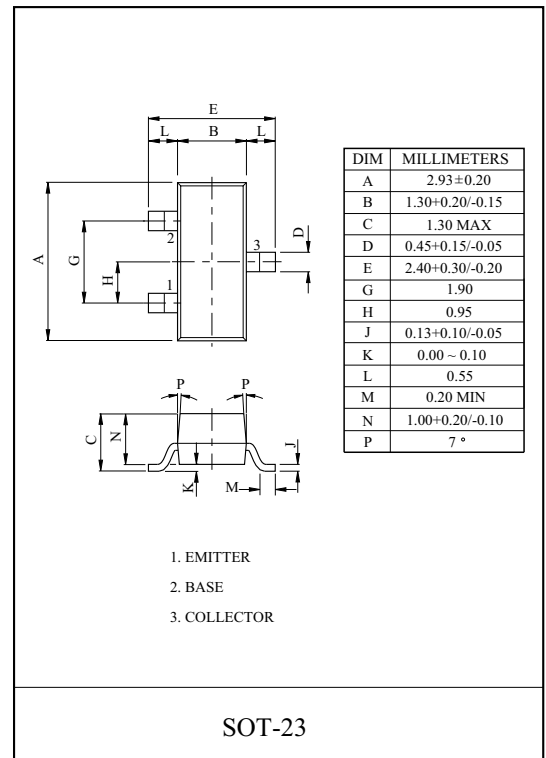
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC116S	1	10
KRC117S	2.2	2.2
KRC118S	2.2	10
KRC119S	4.7	10
KRC120S	10	4.7
KRC121S	47	10
KRC122S	100	100



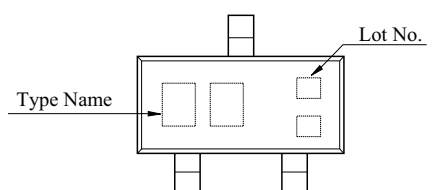
### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC116S ~ 122S	V <sub>O</sub>	50	V
Input Voltage	KRC116S	V <sub>I</sub>	10, -5	V
	KRC117S		12, -10	
	KRC118S		12, -5	
	KRC119S		20, -7	
	KRC120S		30, -10	
	KRC121S		40, -15	
KRC122S	40, -10			
Output Current	KRC116S ~ 122S	I <sub>O</sub>	100	mA
Power Dissipation		P <sub>D</sub>	200	mW
Junction Temperature		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	-55 ~ 150	°C

### MARK SPEC

TYPE	KRC116S	KRC117S	KRC118S	KRC119S	KRC120S	KRC121S	KRC122S
MARK	N2	N4	N5	N6	N7	N8	N9

### Marking



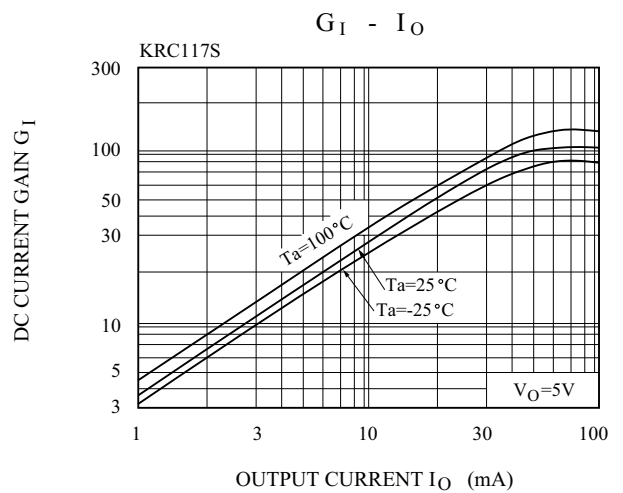
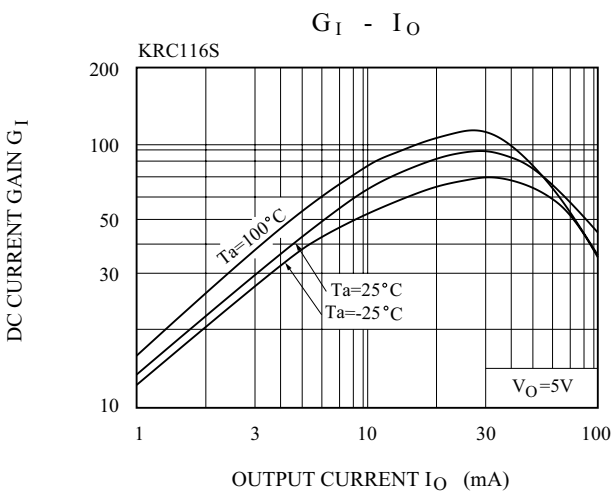
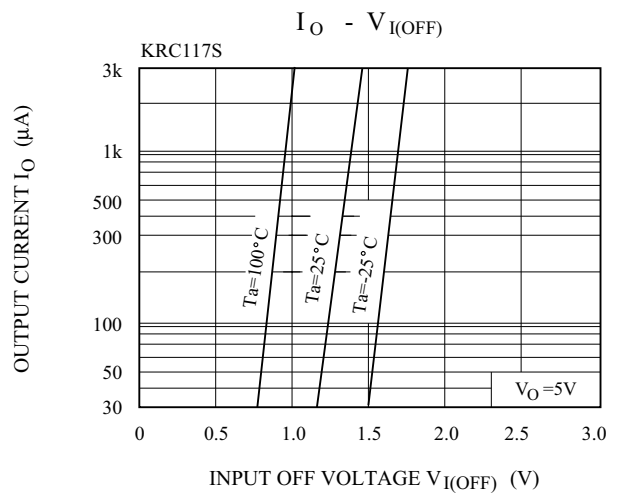
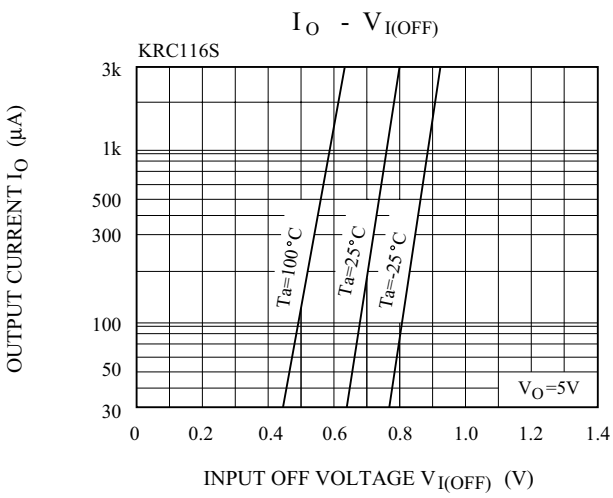
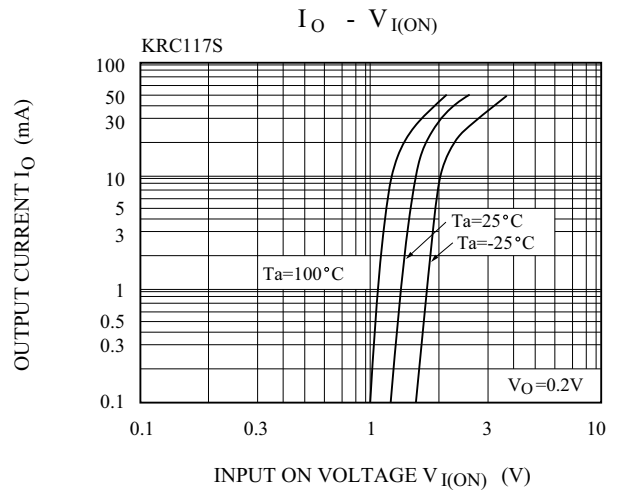
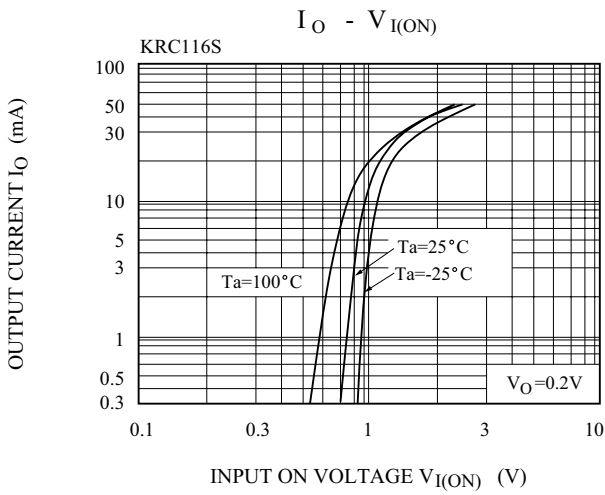
# KRC116S~KRC122S

## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

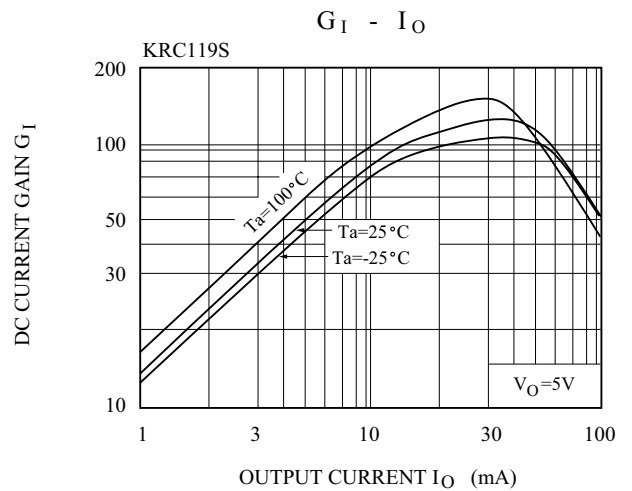
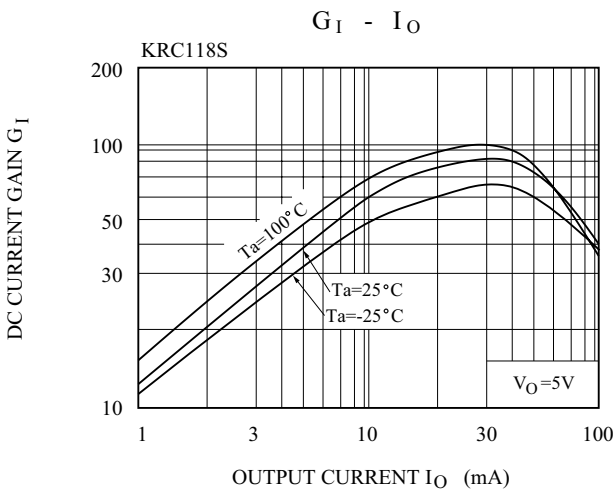
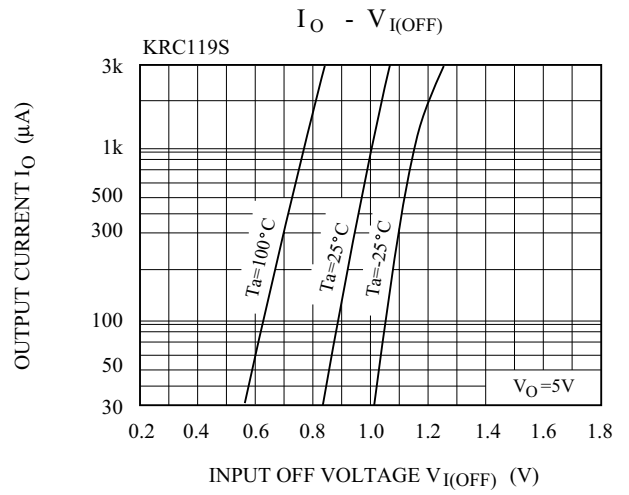
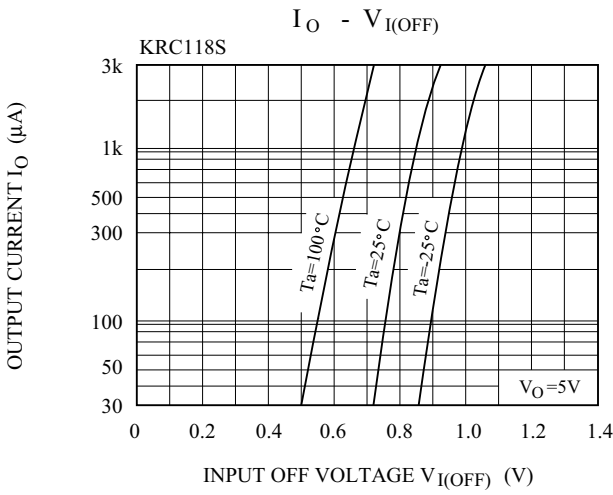
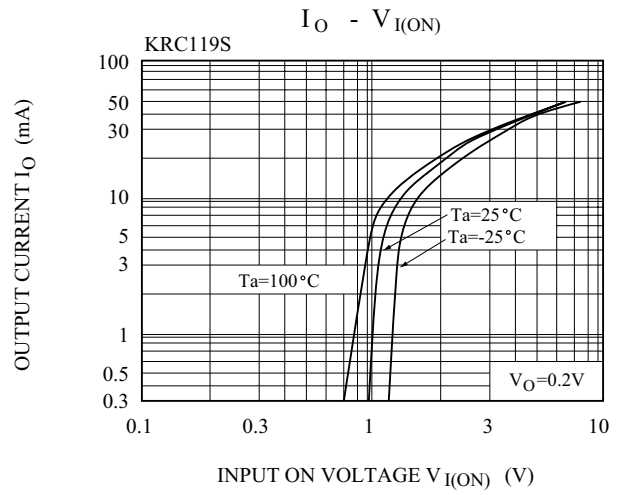
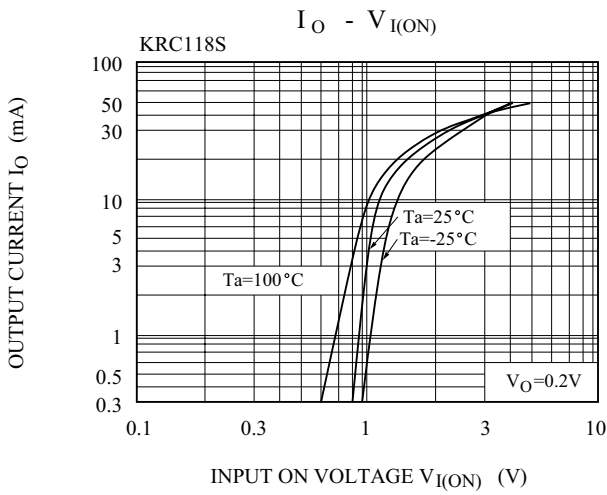
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC116S ~ 122S	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC116S	$G_I$	$V_O=5V, I_O=5mA$	33	-	-	
	KRC117S		$V_O=5V, I_O=20mA$	20	-	-	
	KRC118S		$V_O=5V, I_O=10mA$	33	-	-	
	KRC119S		$V_O=5V, I_O=10mA$	30	-	-	
	KRC120S		$V_O=5V, I_O=10mA$	24	-	-	
	KRC121S		$V_O=5V, I_O=5mA$	33	-	-	
	KRC122S		$V_O=5V, I_O=5mA$	62	-	-	
Output Voltage	KRC116S	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	-	0.3	V
	KRC117S		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC118S		$I_O=10mA, I_I=0.5mA$	-	-	0.3	
	KRC119S		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC120S		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC121S		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC122S		$I_O=5mA, I_I=0.25mA$	-	0.1	0.3	
Input Voltage (ON)	KRC116S	$V_{I(ON)}$	$V_O=0.3V, I_O=20mA$	-	0.98	3	V
	KRC117S		$V_O=0.3V, I_O=20mA$	-	1.83	3	
	KRC118S		$V_O=0.3V, I_O=20mA$	-	1.22	3	
	KRC119S		$V_O=0.3V, I_O=20mA$	-	1.76	2.5	
	KRC120S		$V_O=0.3V, I_O=2mA$	-	2	3	
	KRC121S		$V_O=0.3V, I_O=2mA$	-	3.9	5	
	KRC122S		$V_O=0.3V, I_O=1mA$	-	1.64	3	
Input Voltage (OFF)	KRC116S	$V_{I(OFF)}$	$V_{CC}=5V, I_O=100\mu A$	0.3	0.63	-	V
	KRC117S			0.5	1.15	-	
	KRC118S			0.3	0.67	-	
	KRC119S			0.3	0.82	-	
	KRC120S			0.8	1.68	-	
	KRC121S			1	3.09	-	
	KRC122S			0.5	1.17	-	
Transition Frequency	KRC116S ~ 122S	$f_T^*$	$V_O=10V, I_O=5mA$	-	250	-	MHz
Input Current	KRC116S	$I_I$	$V_I=5V$	-	-	7.2	mA
	KRC117S			-	-	3.8	
	KRC118S			-	-	3.8	
	KRC119S			-	-	1.8	
	KRC120S			-	-	0.88	
	KRC121S			-	-	0.16	
	KRC122S			-	-	0.15	

Note : \* Characteristic of Transistor Only.

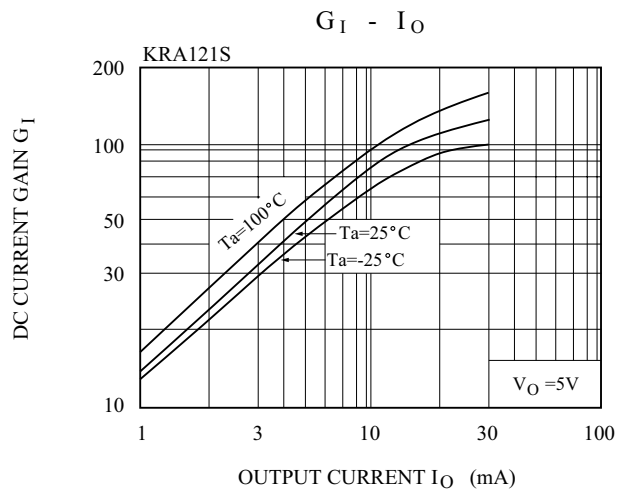
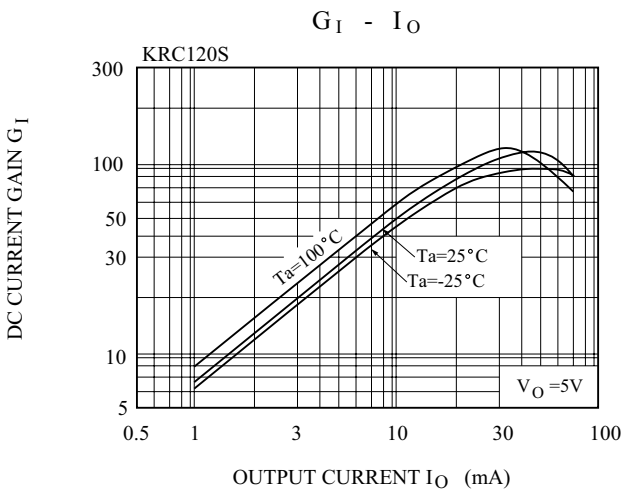
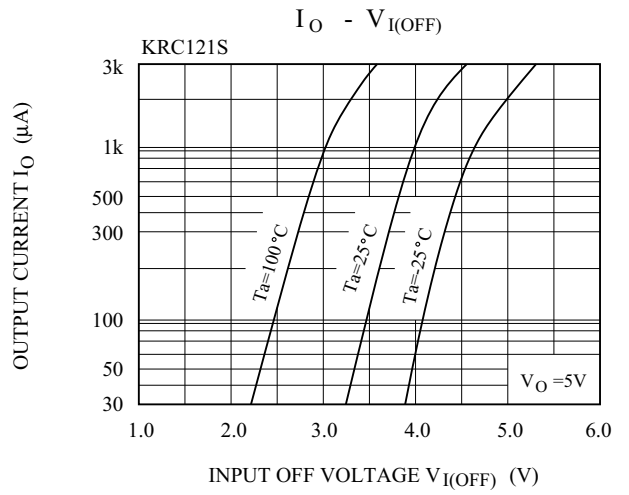
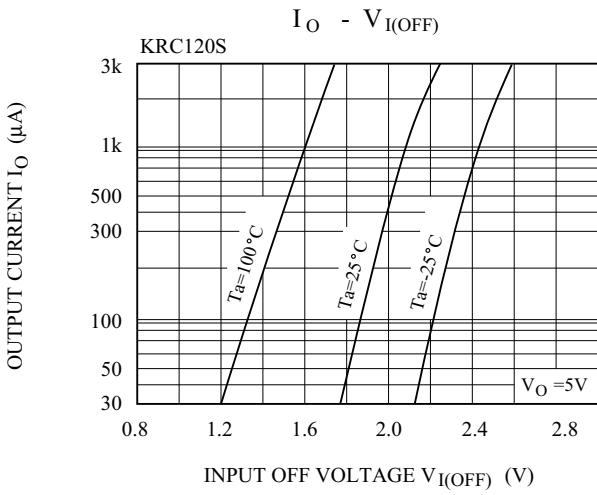
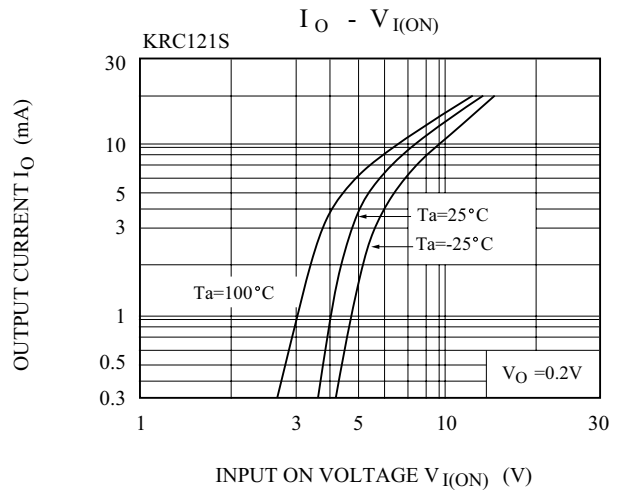
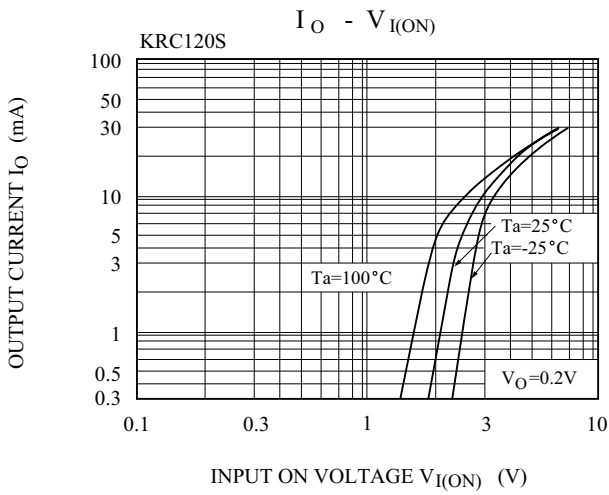
# KRC116S~KRC122S



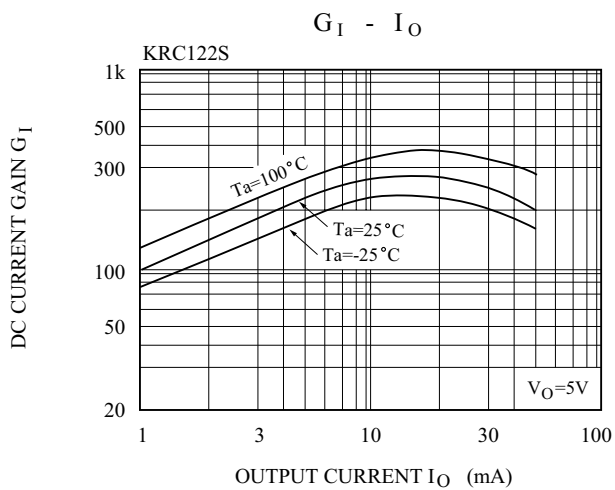
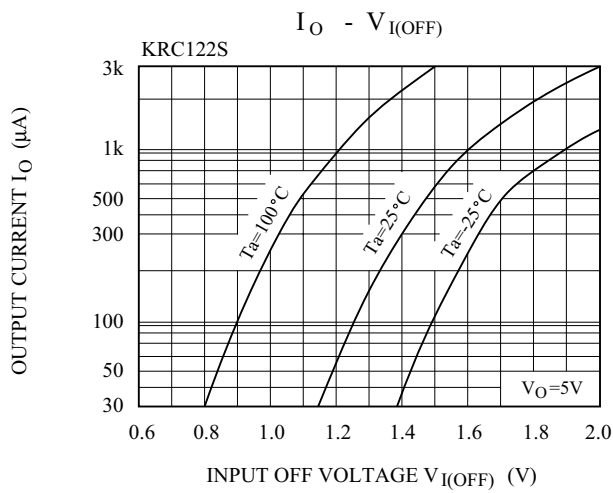
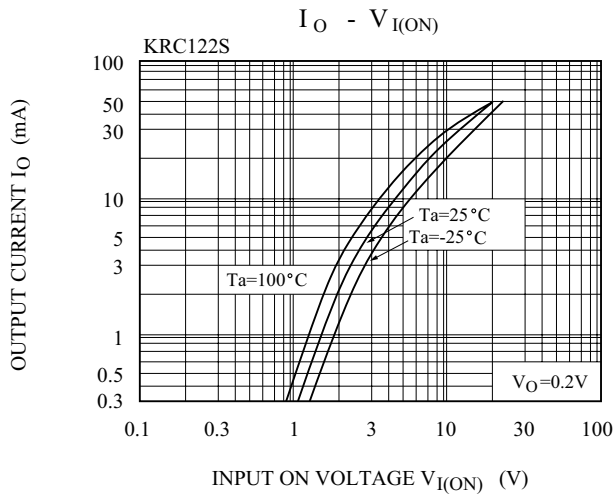
# KRC116S~KRC122S



# KRC116S~KRC122S



# KRC116S~KRC122S



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