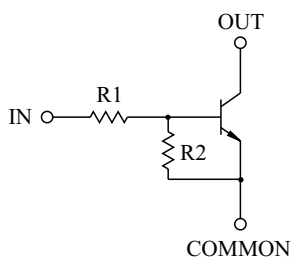


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

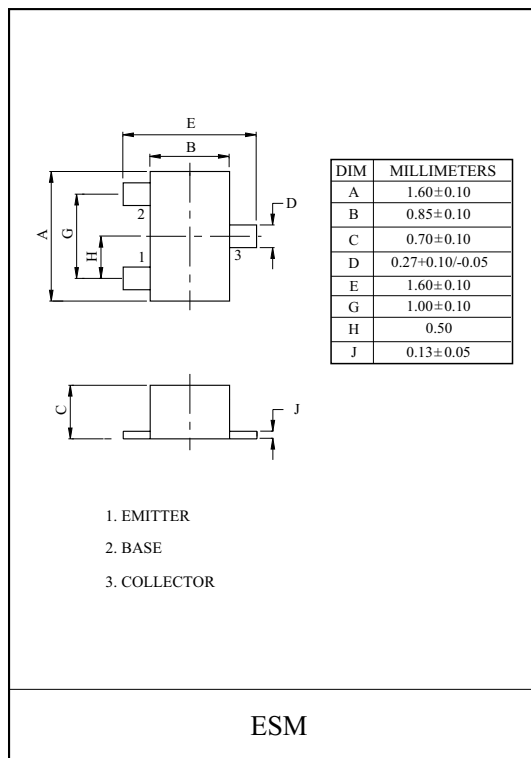
FEATURES

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

EQUIVALENT CIRCUIT



TYPE NO.	R1(k Ω)	R2(k Ω)
KRC416E	1	10
KRC417E	2.2	2.2
KRC418E	2.2	10
KRC419E	4.7	10
KRC420E	10	4.7
KRC421E	47	10
KRC422E	100	100



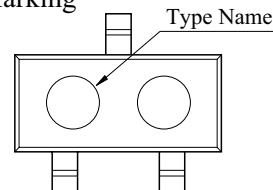
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC416E~422E	V_O	50	V
Input Voltage	KRC416E	V_I	10, -5	V
	KRC417E		12, -10	
	KRC418E		12, -5	
	KRC419E		20, -7	
	KRC420E		30, -10	
	KRC421E		40, -15	
	KRC422E		40, -10	
Output Current	KRC416E~422E	I_O	100	mA
Power Dissipation		P_D	100	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

MARK SPEC

TYPE	KRC416E	KRC417E	KRC418E	KRC419E	KRC420E	KRC421E	KRC422E
MARK	N2	N4	N5	N6	N7	N8	N9

Marking



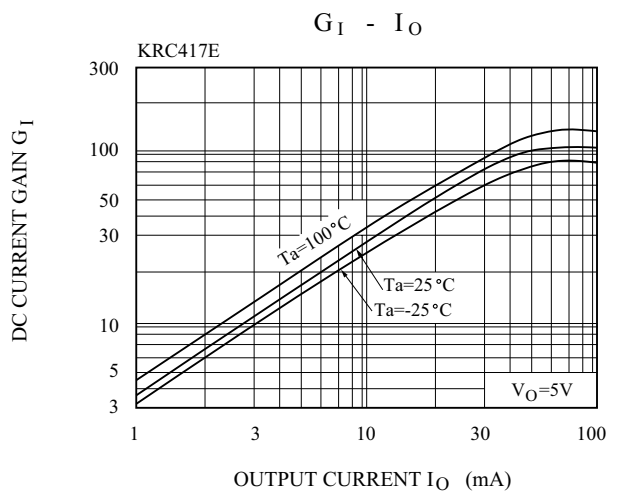
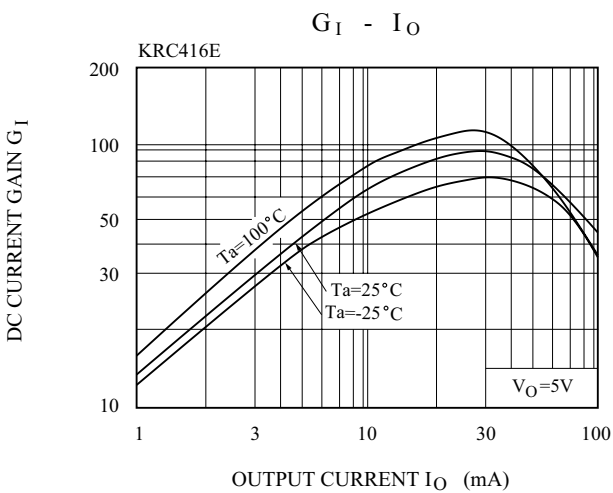
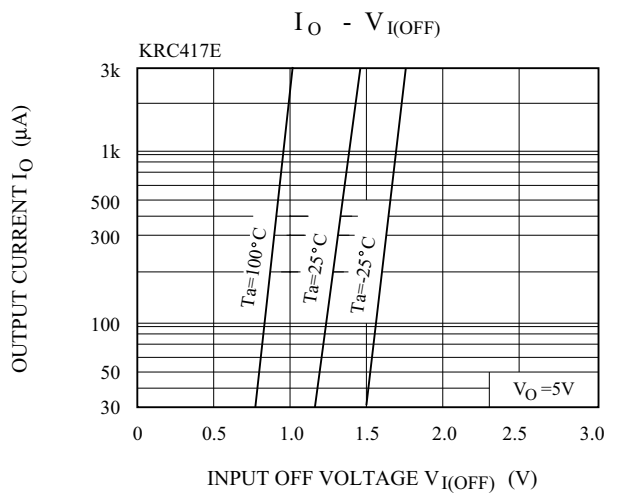
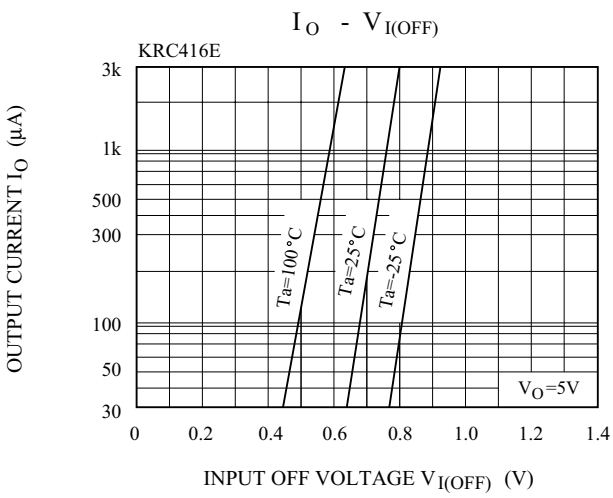
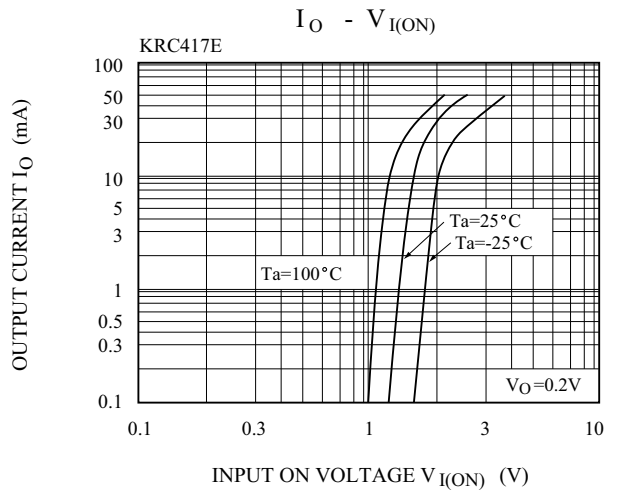
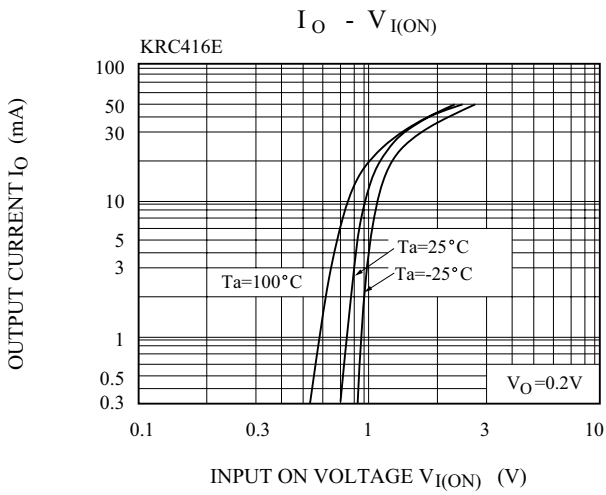
KRC416E~KRC422E

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

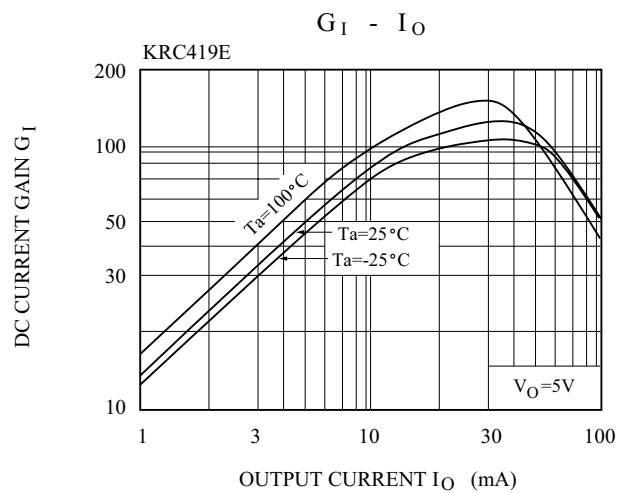
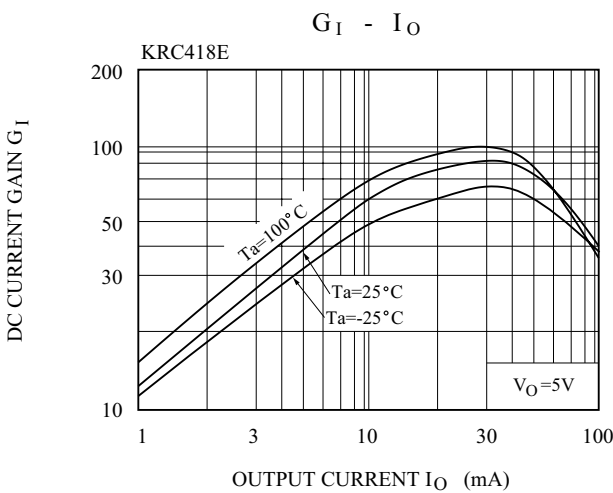
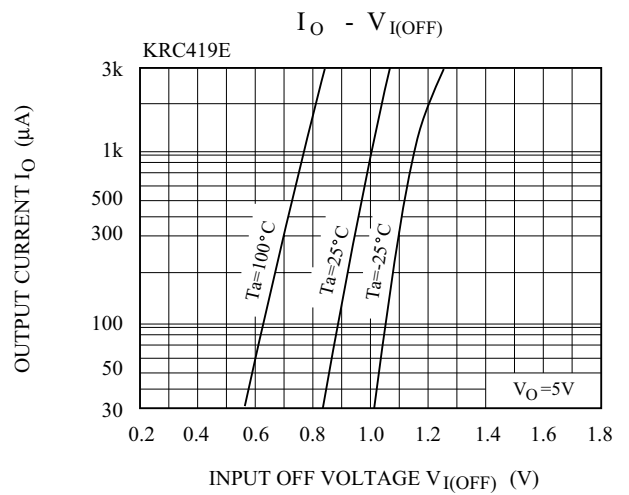
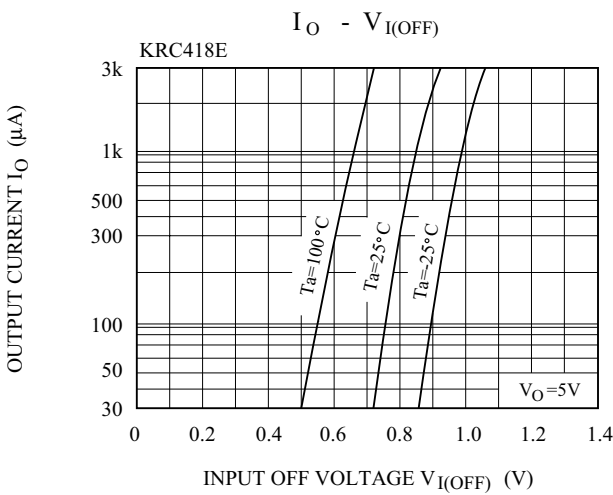
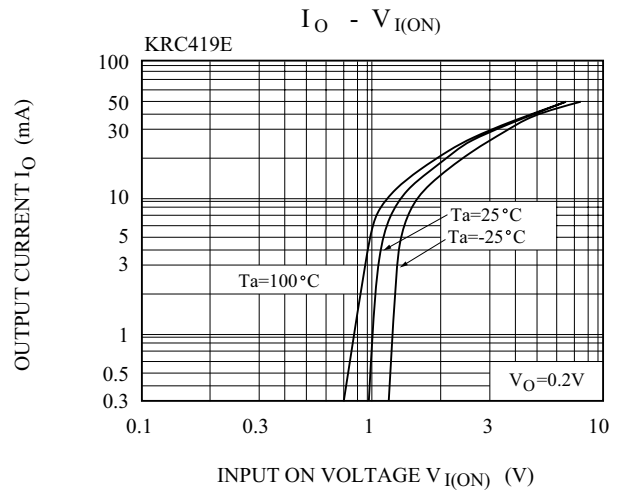
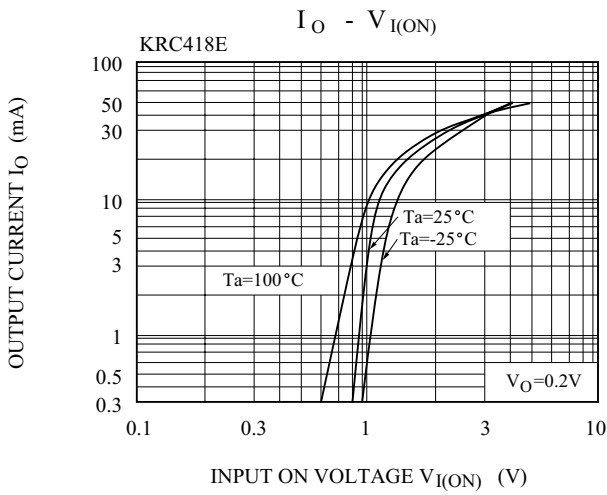
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC416E~422E	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC416E	G_I	$V_O=5V, I_O=5mA$	33	-	-	
	KRC417E		$V_O=5V, I_O=20mA$	20	-	-	
	KRC418E		$V_O=5V, I_O=10mA$	33	-	-	
	KRC419E		$V_O=5V, I_O=10mA$	30	-	-	
	KRC420E		$V_O=5V, I_O=10mA$	24	-	-	
	KRC421E		$V_O=5V, I_O=5mA$	33	-	-	
	KRC422E		$V_O=5V, I_O=5mA$	62	-	-	
Output Voltage	KRC416E	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	-	0.3	V
	KRC417E		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC418E		$I_O=10mA, I_I=0.5mA$	-	-	0.3	
	KRC419E		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC420E		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC421E		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC422E		$I_O=5mA, I_I=0.25mA$	-	0.1	0.3	
Input Voltage (ON)	KRC416E	$V_{I(ON)}$	$V_O=0.3V, I_O=20mA$	-	0.98	3	V
	KRC417E		$V_O=0.3V, I_O=20mA$	-	1.83	3	
	KRC418E		$V_O=0.3V, I_O=20mA$	-	1.22	3	
	KRC419E		$V_O=0.3V, I_O=20mA$	-	1.76	2.5	
	KRC420E		$V_O=0.3V, I_O=2mA$	-	2	3	
	KRC421E		$V_O=0.3V, I_O=2mA$	-	3.9	5	
	KRC422E		$V_O=0.3V, I_O=1mA$	-	1.64	3	
Input Voltage (OFF)	KRC416E	$V_{I(OFF)}$	$V_{CC}=5V, I_O=100\mu A$	0.3	0.63	-	V
	KRC417E			0.5	1.15	-	
	KRC418E			0.3	0.67	-	
	KRC419E			0.3	0.82	-	
	KRC420E			0.8	1.68	-	
	KRC421E			1	3.09	-	
	KRC422E			0.5	1.17	-	
Transition Frequency	KRC416E~422E	f_T^*	$V_O=10V, I_O=5mA$	-	250	-	MHz
Input Current	KRC416E	I_I	$V_I=5V$	-	-	7.2	mA
	KRC417E			-	-	3.8	
	KRC418E			-	-	3.8	
	KRC419E			-	-	1.8	
	KRC420E			-	-	0.88	
	KRC421E			-	-	0.16	
	KRC422E			-	-	0.15	

Note : * Characteristic of Transistor Only.

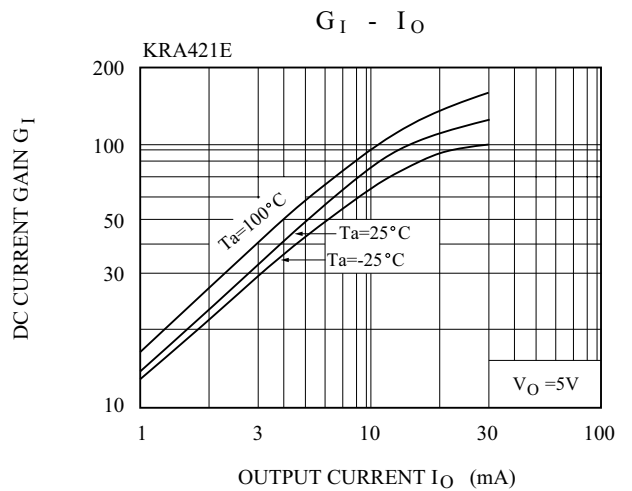
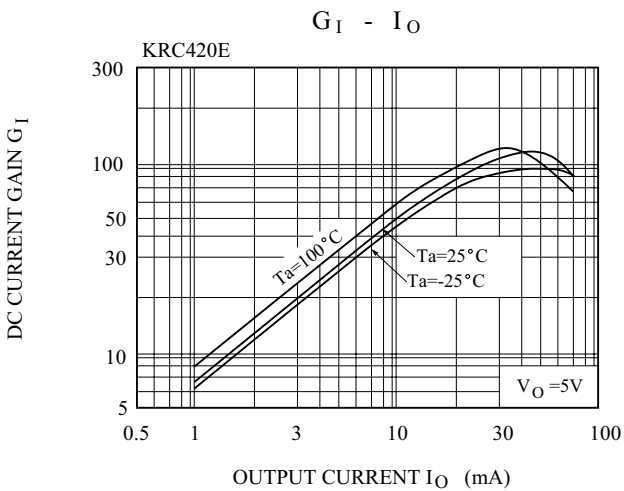
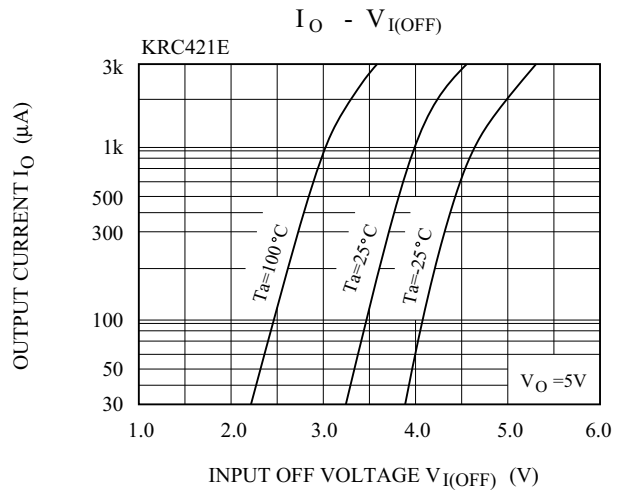
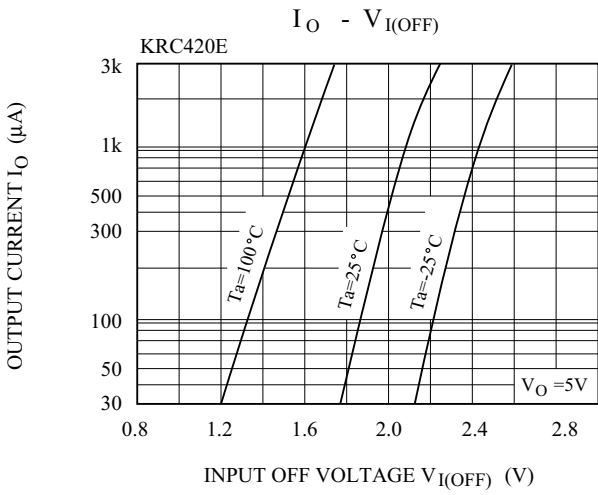
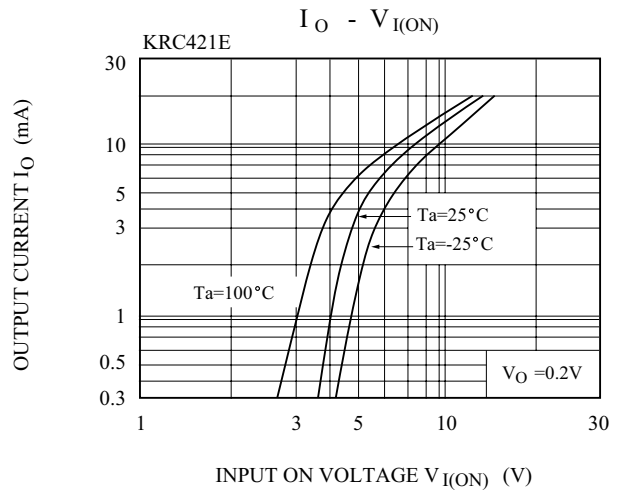
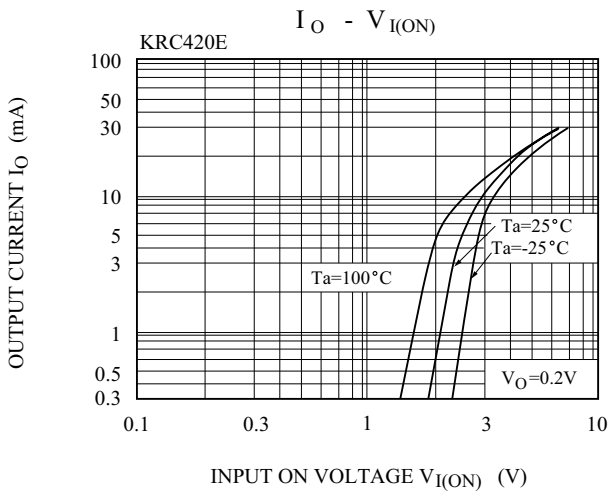
KRC416E~KRC422E



KRC416E~KRC422E



KRC416E~KRC422E



KRC416E~KRC422E

