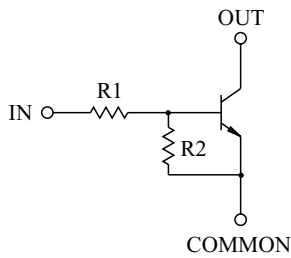


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

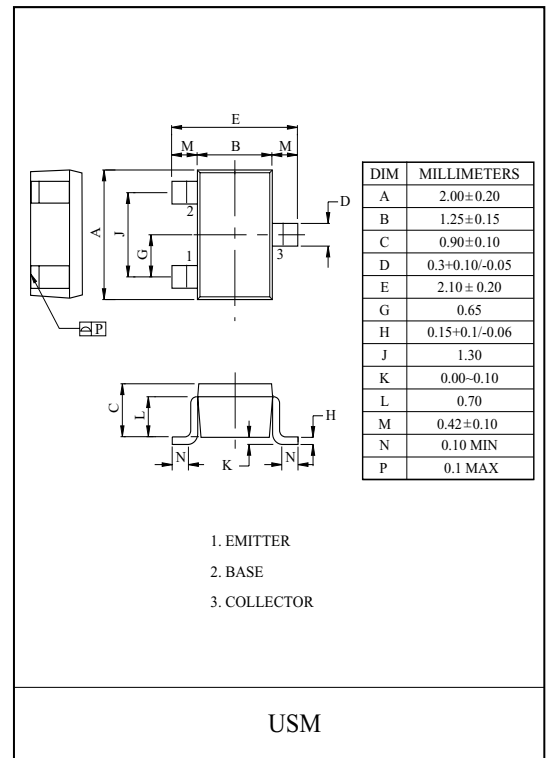
FEATURES

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

EQUIVALENT CIRCUIT



TYPE NO.	R1(k)	R2(k)
KRC416	1	10
KRC417	2.2	2.2
KRC418	2.2	10
KRC419	4.7	10
KRC420	10	4.7
KRC421	47	10
KRC422	100	100



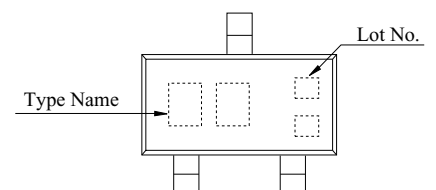
MAXIMUM RATING (Ta=25)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC416~422	V_O	50	V
Input Voltage	KRC416	V_i	10, -5	V
	KRC417		12, -10	
	KRC418		12, -5	
	KRC419		20, -7	
	KRC420		30, -10	
	KRC421		40, -15	
	KRC422		40, -10	
Output Current	KRC416~422	I_O	100	mA
Power Dissipation		P_D	100	mW
Junction Temperature		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	

MARK SPEC

TYPE	KRC416	KRC417	KRC418	KRC419	KRC420	KRC421	KRC422
MARK	N2	N4	N5	N6	N7	N8	N9

Marking



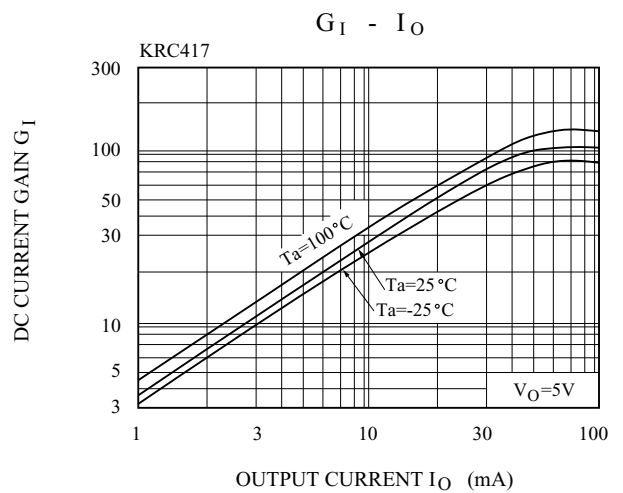
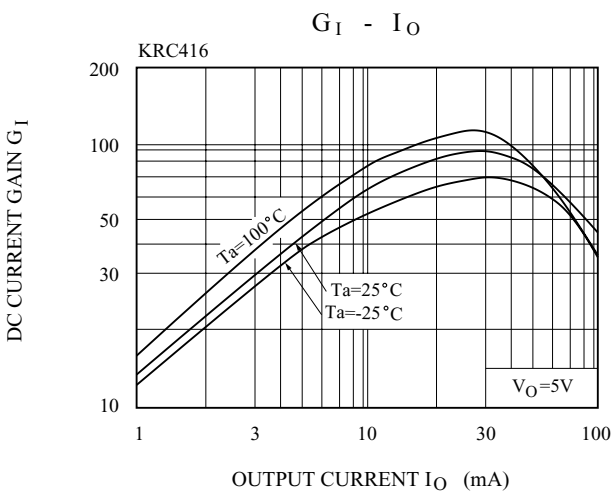
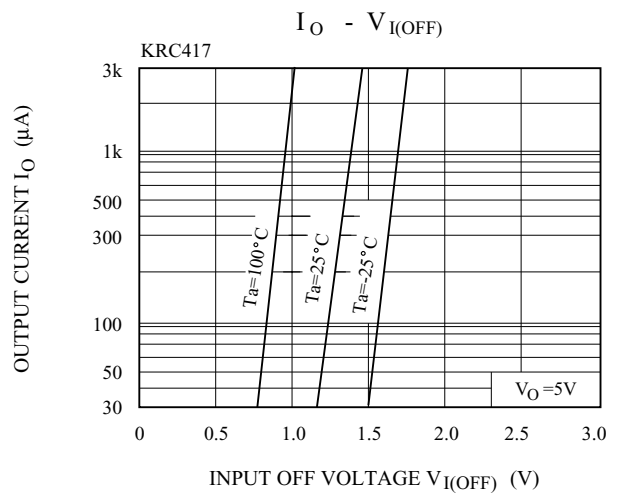
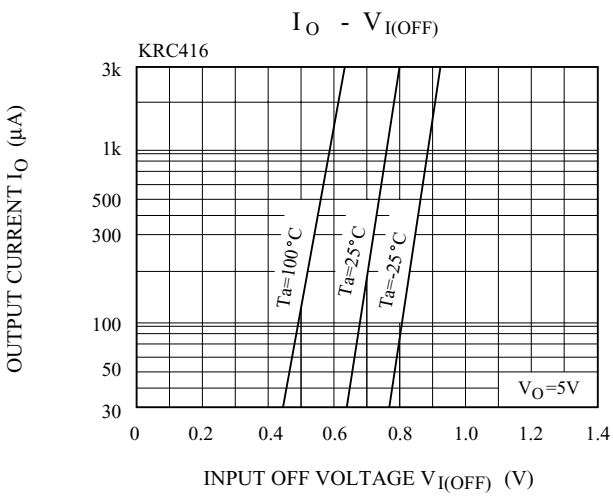
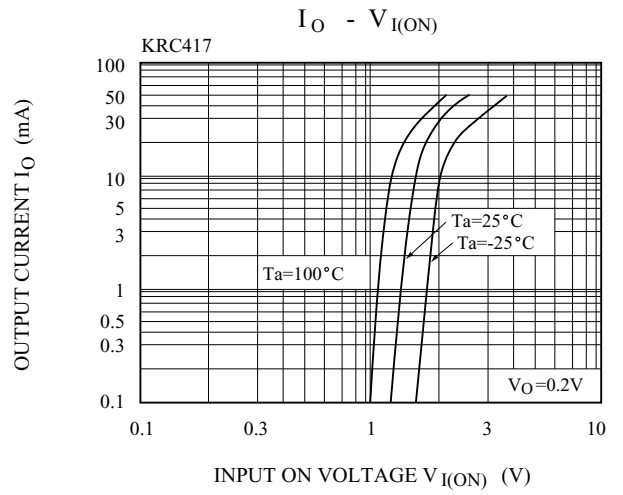
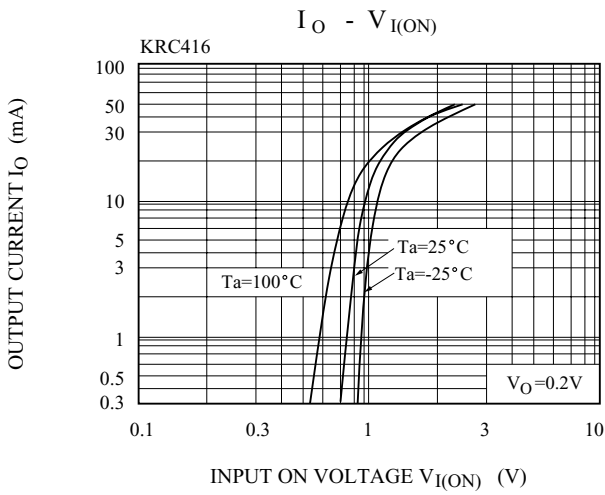
KRC416~KRC422

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

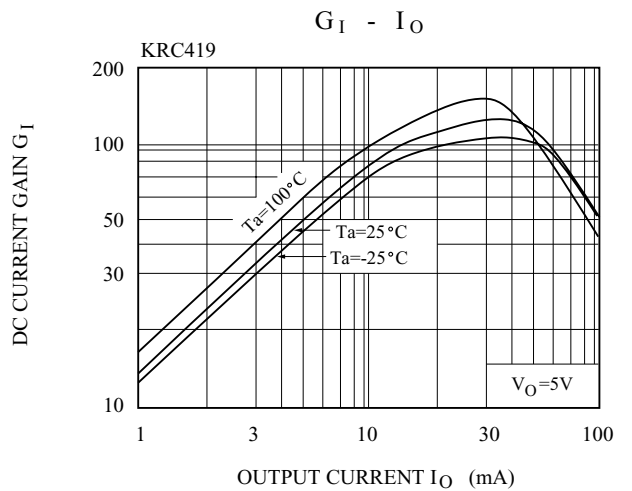
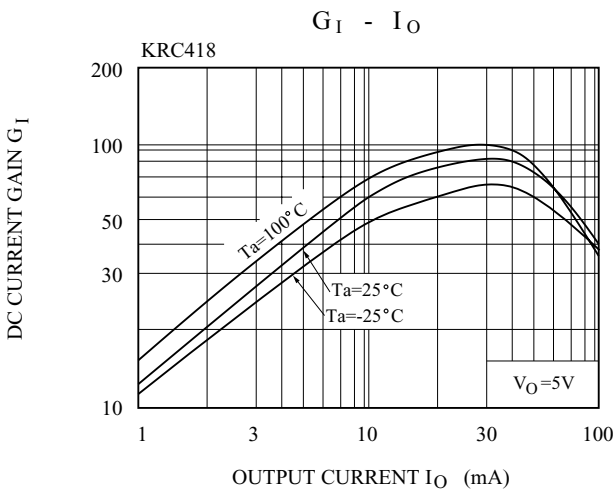
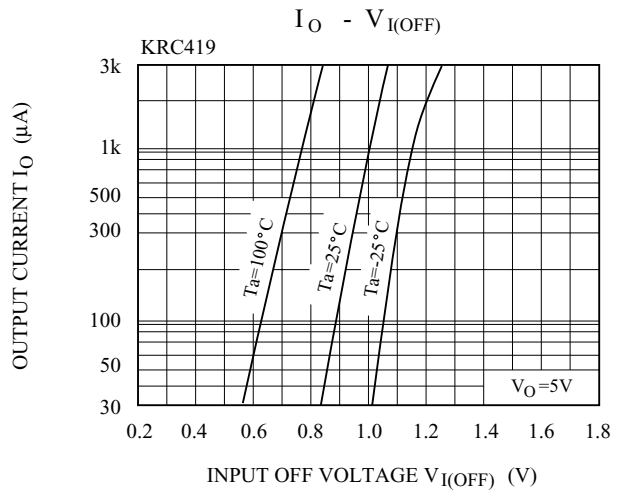
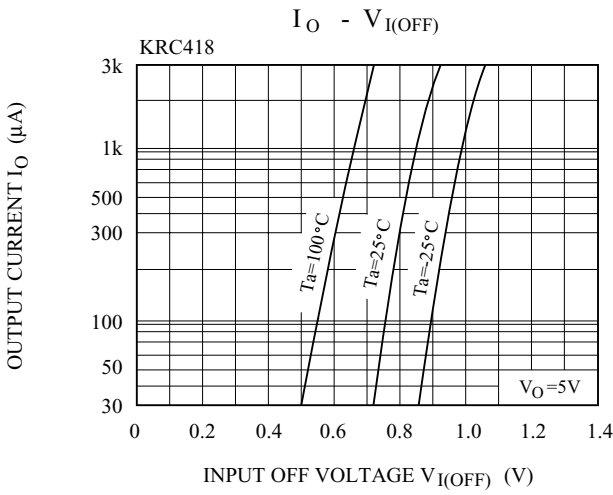
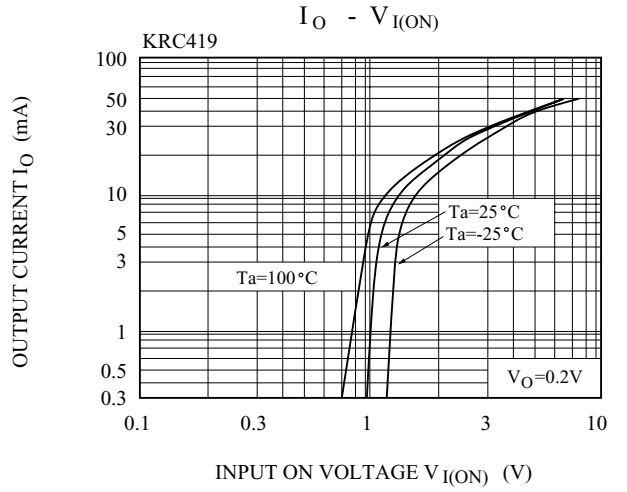
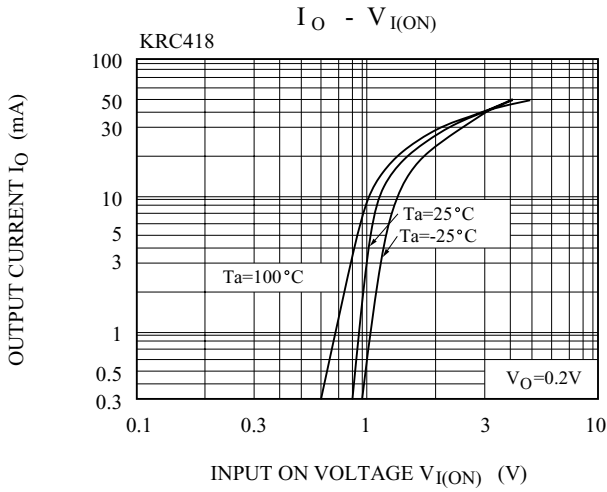
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC416 422	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC416	G_I	$V_O=5V, I_O=5mA$	33	-	-	
	KRC417		$V_O=5V, I_O=20mA$	20	-	-	
	KRC418		$V_O=5V, I_O=10mA$	33	-	-	
	KRC419		$V_O=5V, I_O=10mA$	30	-	-	
	KRC420		$V_O=5V, I_O=10mA$	24	-	-	
	KRC421		$V_O=5V, I_O=5mA$	33	-	-	
	KRC422		$V_O=5V, I_O=5mA$	62	-	-	
Output Voltage	KRC416	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	-	0.3	V
	KRC417		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC418		$I_O=10mA, I_I=0.5mA$	-	-	0.3	
	KRC419		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC420		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC421		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC422		$I_O=5mA, I_I=0.25mA$	-	0.1	0.3	
Input Voltage (ON)	KRC416	$V_{I(ON)}$	$V_O=0.3V, I_O=20mA$	-	0.98	3	V
	KRC417		$V_O=0.3V, I_O=20mA$	-	1.83	3	
	KRC418		$V_O=0.3V, I_O=20mA$	-	1.22	3	
	KRC419		$V_O=0.3V, I_O=20mA$	-	1.76	2.5	
	KRC420		$V_O=0.3V, I_O=2mA$	-	2	3	
	KRC421		$V_O=0.3V, I_O=2mA$	-	3.9	5	
	KRC422		$V_O=0.3V, I_O=1mA$	-	1.64	3	
Input Voltage (OFF)	KRC416	$V_{I(OFF)}$	$V_{CC}=5V, I_O=100\mu A$	0.3	0.63	-	V
	KRC417			0.5	1.15	-	
	KRC418			0.3	0.67	-	
	KRC419			0.3	0.82	-	
	KRC420			0.8	1.68	-	
	KRC421			1	3.09	-	
	KRC422			0.5	1.17	-	
Transition Frequency	KRC416 422	f_T^*	$V_O=10V, I_O=5mA$	-	250	-	MHz
Input Current	KRC416	I_I	$V_I=5V$	-	-	7.2	mA
	KRC417			-	-	3.8	
	KRC418			-	-	3.8	
	KRC419			-	-	1.8	
	KRC420			-	-	0.88	
	KRC421			-	-	0.16	
	KRC422			-	-	0.15	
Input Resistor	KRC416	R1	-	0.7	1	1.3	k
	KRC417			1.54	2.2	2.86	
	KRC418			1.54	2.2	2.86	
	KRC419			3.29	4.7	6.11	
	KRC420			7	10	13	
	KRC421			32.9	47	61.1	
	KRC422			70	100	130	
Resistor Ratio	KRC416	R2/R1	-	8	10	12	
	KRC417			0.8	1.0	1.2	
	KRC418			3.6	4.5	5.5	
	KRC419			1.7	2.1	2.6	
	KRC420			0.37	0.47	0.57	
	KRC421			0.17	0.21	0.26	
	KRC422			0.8	1.0	1.2	

Note : * Characteristic of Transistor Only.

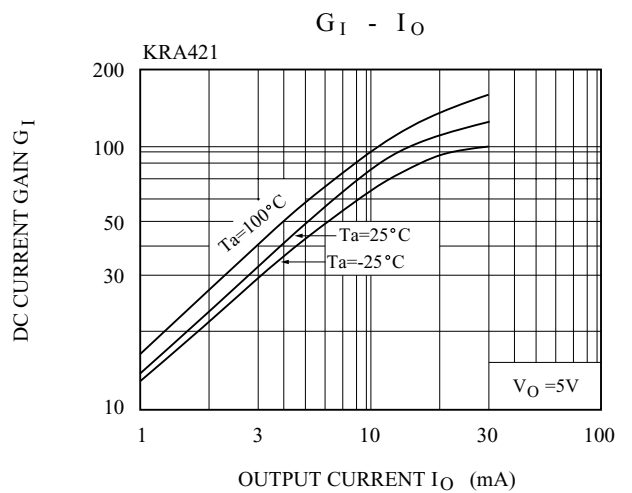
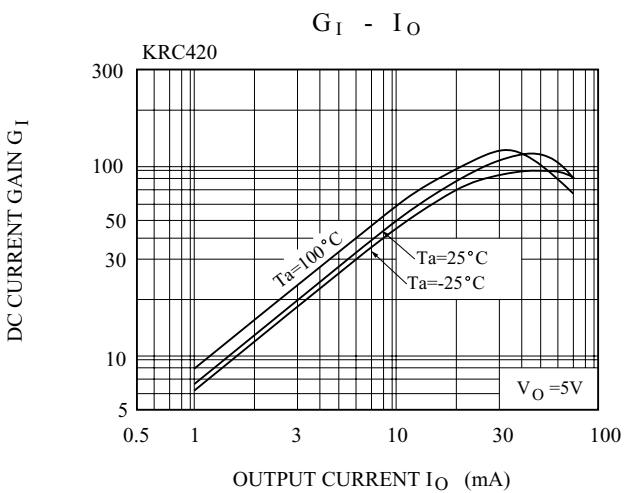
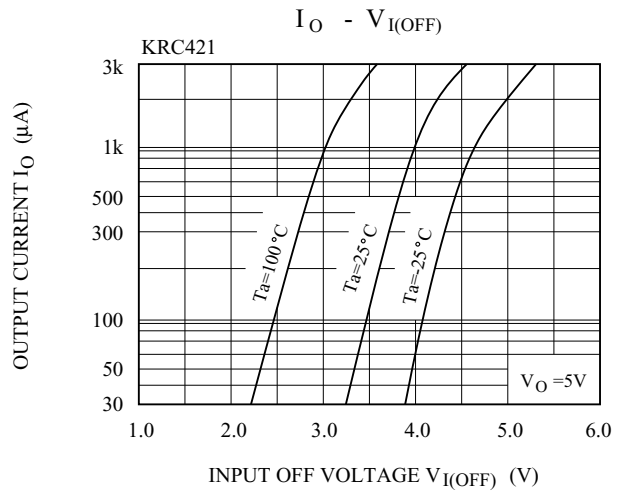
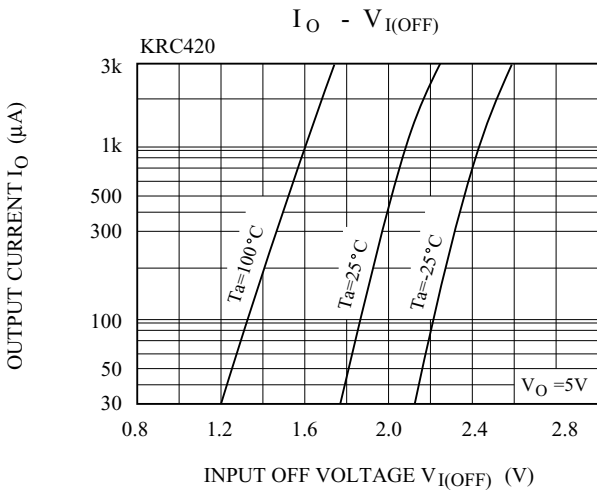
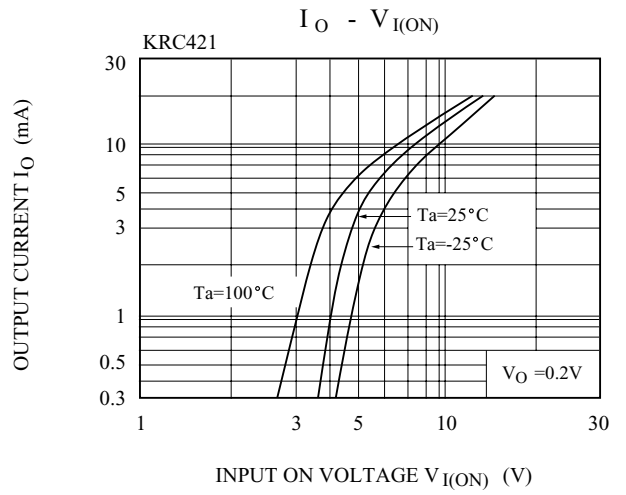
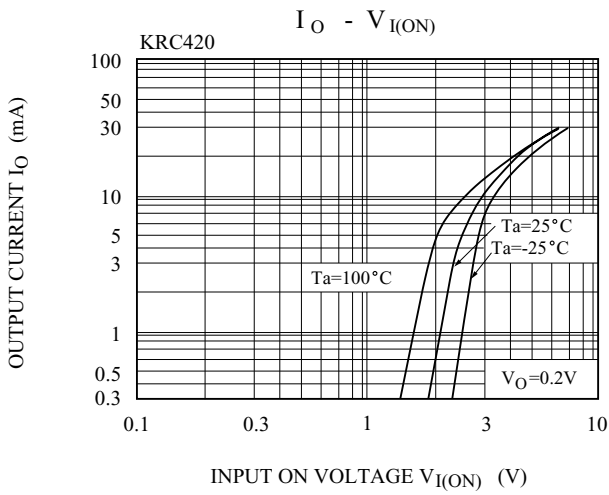
KRC416~KRC422



KRC416~KRC422



KRC416~KRC422



KRC416~KRC422

