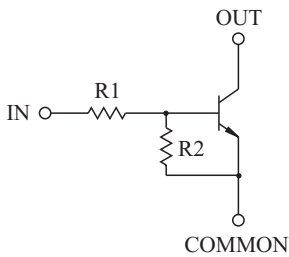


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

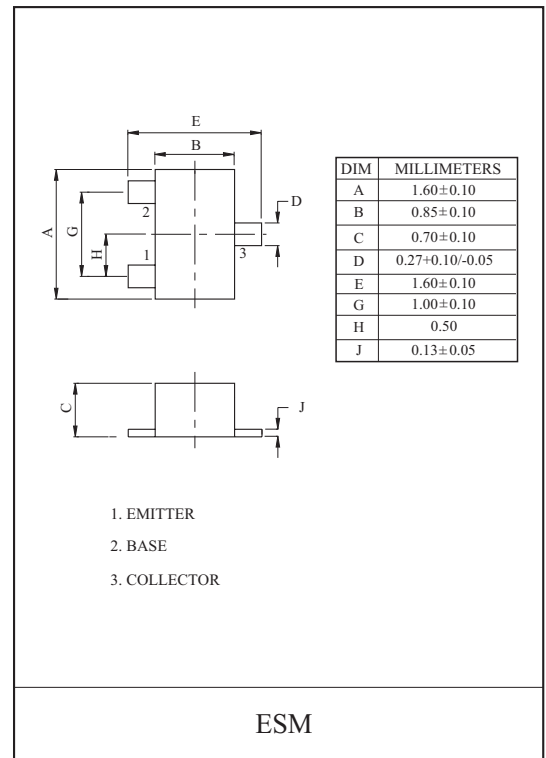
#### FEATURES

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

#### EQUIVALENT CIRCUIT



TYPE NO.	R1(k )	R2(k )
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



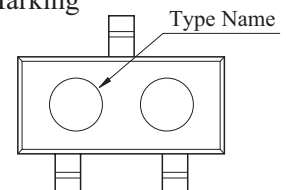
#### MAXIMUM RATING (Ta=25 )

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

#### MARK SPEC

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

#### Marking



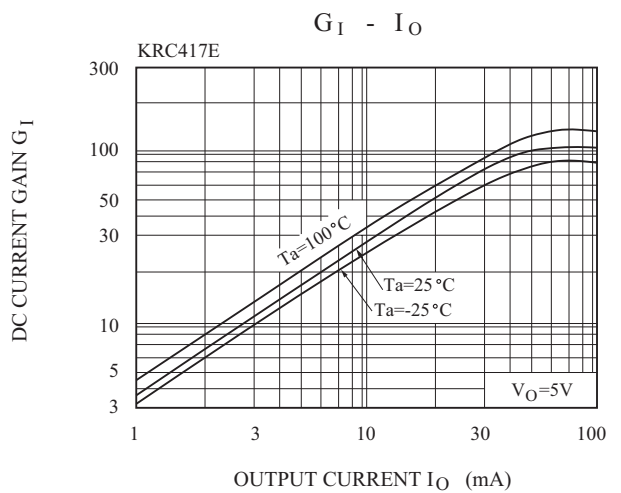
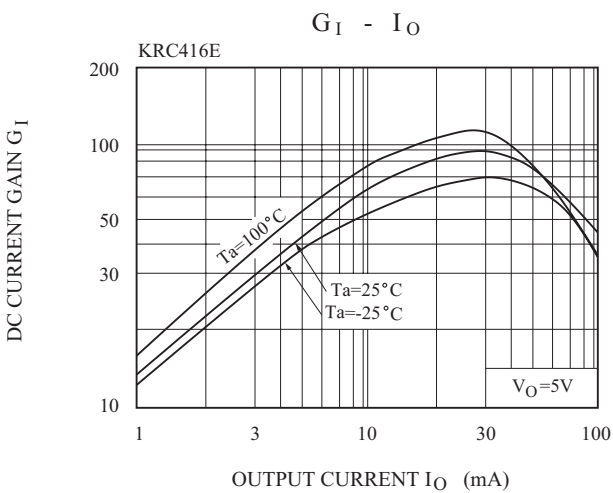
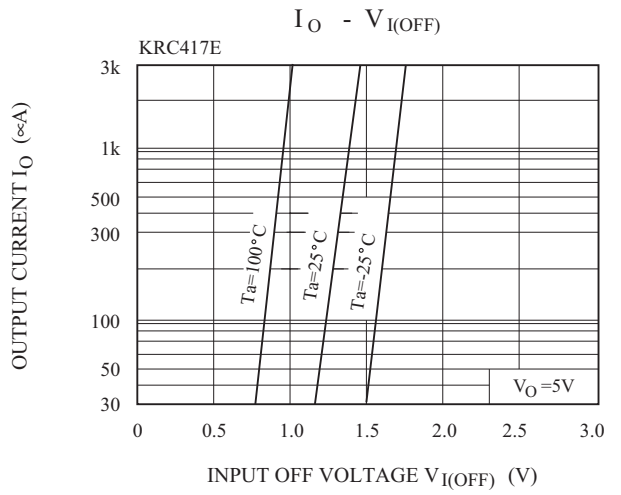
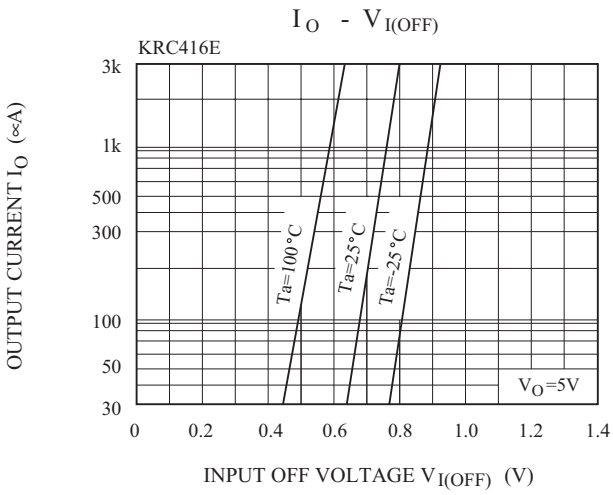
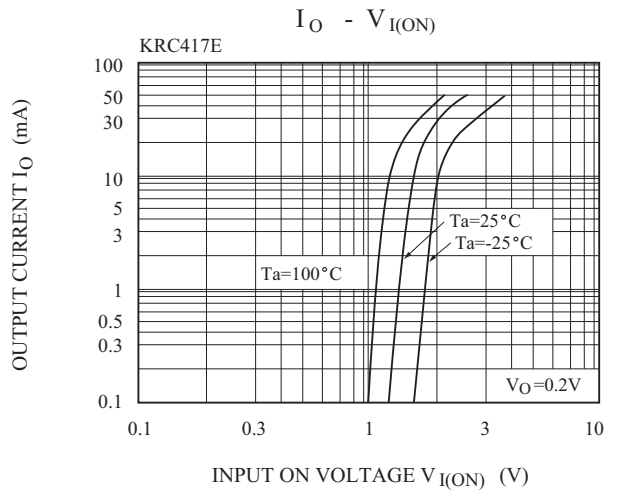
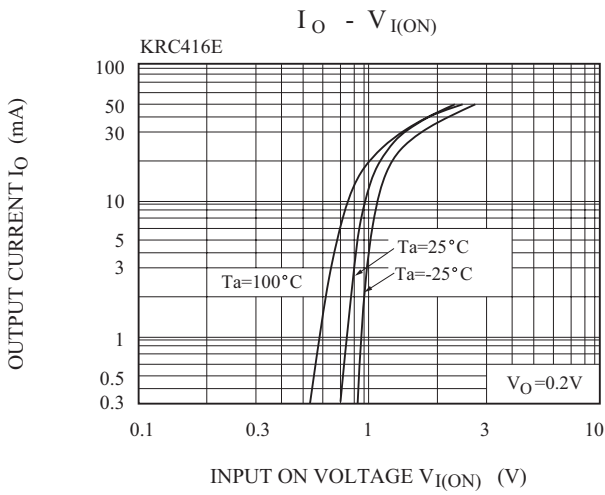
# KRC416E~KRC422E

## ELECTRICAL CHARACTERISTICS (Ta=25 )

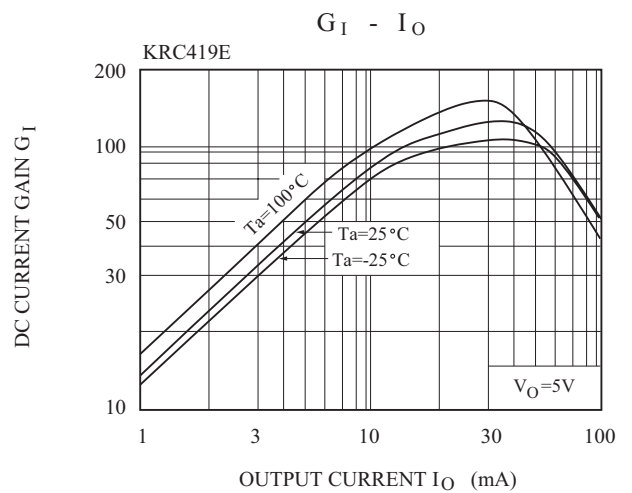
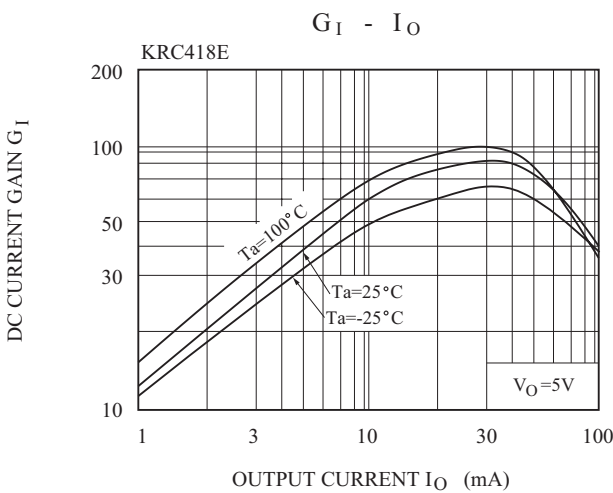
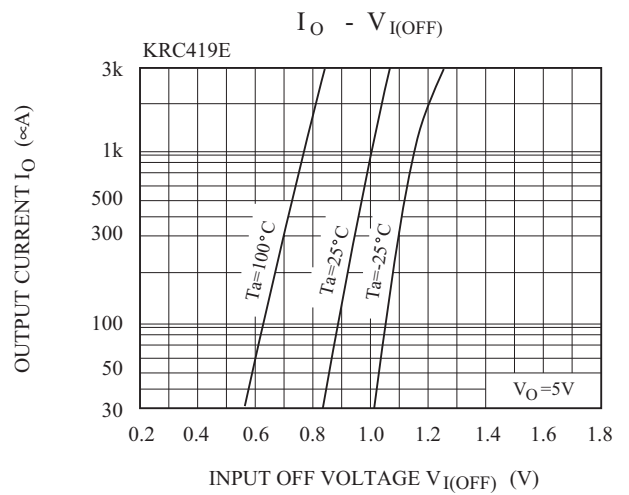
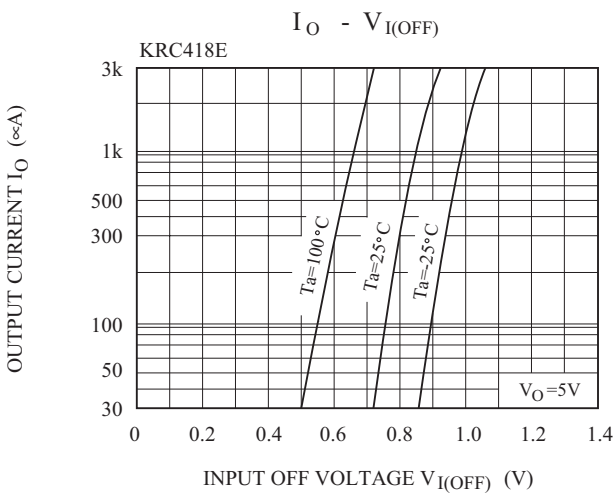
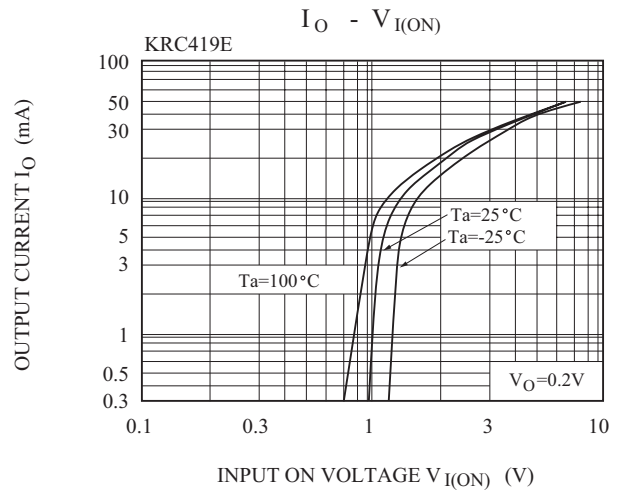
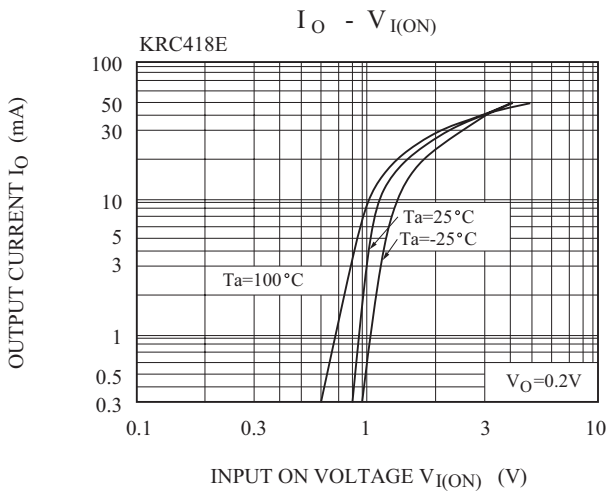
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC416E~422E	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC416E	$G_I$	$V_O=5V, I_O=5mA$	33	-	-	
	KRC417E		$V_O=5V, I_O=20mA$	20	-	-	
	KRC418E		$V_O=5V, I_O=10mA$	33	-	-	
	KRC419E		$V_O=5V, I_O=10mA$	30	-	-	
	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	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	
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
	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
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	$f_T^*$			$V_O=10V, I_O=5mA$	-
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	
	Input Resistor			KRC416E	R1	-	
KRC417E		1.54	2.2	2.86			
KRC418E		1.54	2.2	2.86			
KRC419E		3.29	4.7	6.11			
KRC420E		7	10	13			
KRC421E		32.9	47	61.1			
KRC422E		70	100	130			
Resistor Ratio		KRC416E	R2/R1	-			8
	KRC417E	0.8			1.0	1.2	
	KRC418E	3.6			4.5	5.5	
	KRC419E	1.7			2.1	2.6	
	KRC420E	0.37			0.47	0.57	
	KRC421E	0.17			0.21	0.26	
	KRC422E	0.8			1.0	1.2	

Note : \* Characteristic of Transistor Only.

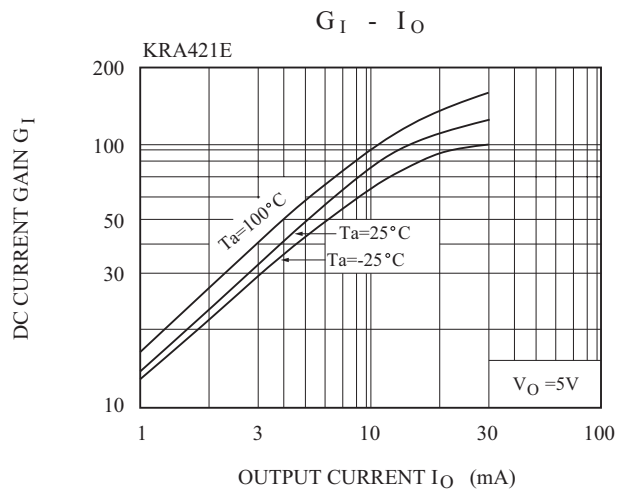
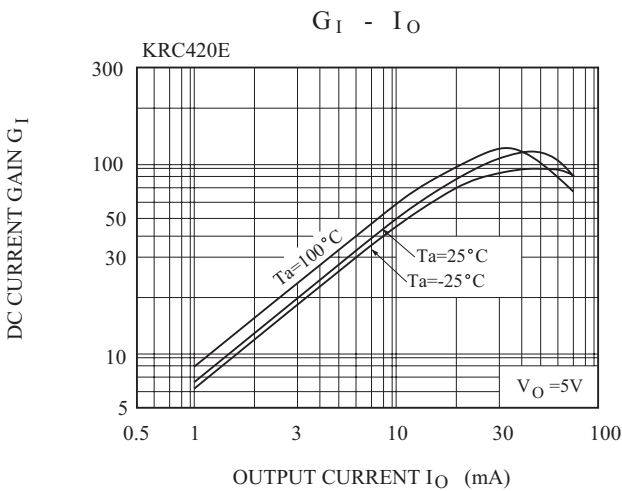
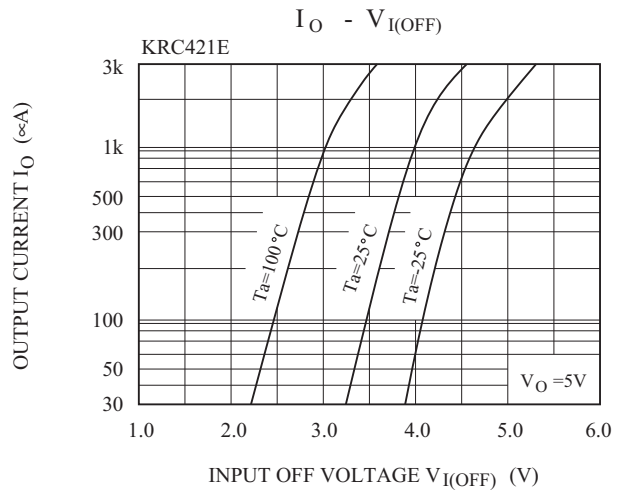
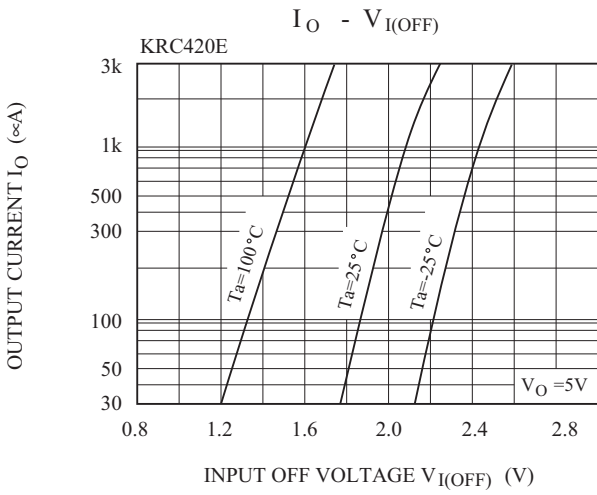
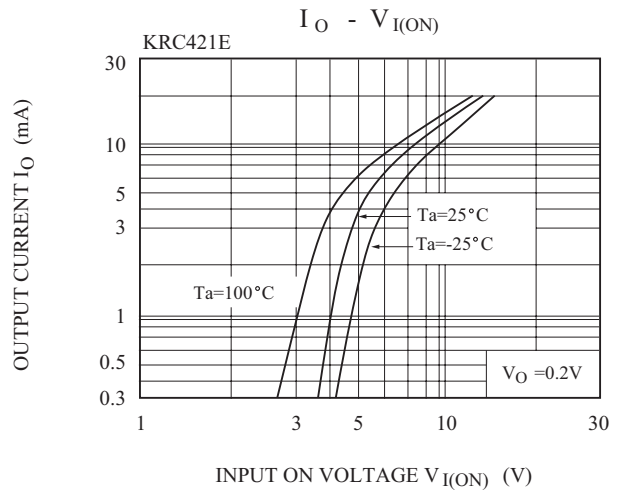
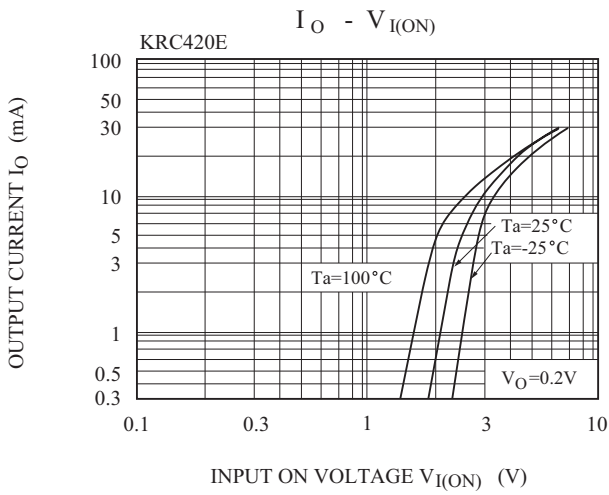
# KRC416E~KRC422E



# KRC416E~KRC422E



# KRC416E~KRC422E



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