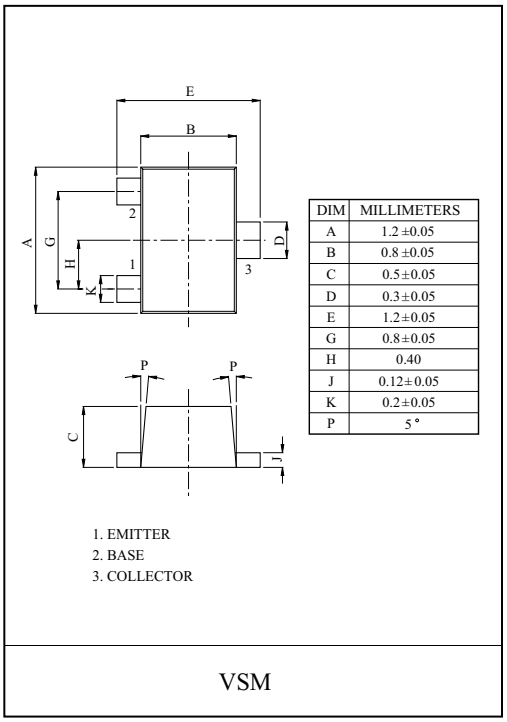
SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

FEATURES

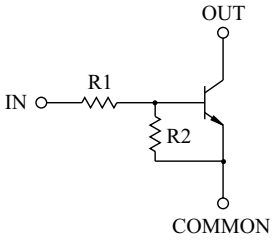
· With Built-in Bias Resistors.
· Simplify Circuit Design.
· Reduce a Quantity of Parts and Manufacturing Process.



DIM	MILLIMETERS
A	1.2 ±0.05
B	0.8 ±0.05
C	0.5±0.05
D	0.3±0.05
E	1.2±0.05
G	0.8±0.05
H	0.40
J	0.12± 0.05
K	0.2±0.05
P	5°

VSM

EQUIVALENT CIRCUIT



TYPE NO.	R1(kΩ)	R2(kΩ)
KRC416V	1	10
KRC417V	2.2	2.2
KRC418V	2.2	10
KRC419V	4.7	10
KRC420V	10	4.7
KRC421V	47	10
KRC422V	100	100

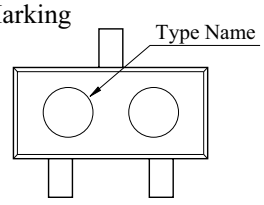
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC416V~422V	V_O	50	V
Input Voltage	KRC416V	V_I	10, -5	V
	KRC417V		12, -10	
	KRC418V		12,-5	
	KRC419V		20, -7	
	KRC420V		30, -10	
	KRC421V		40, -15	
	KRC422V		40, -10	
Output Current	KRC416V~422V	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	KRC416V	KRC417V	KRC418V	KRC419V	KRC420V	KRC421V	KRC422V
MARK	N2	N4	N5	N6	N7	N8	N9

Marking

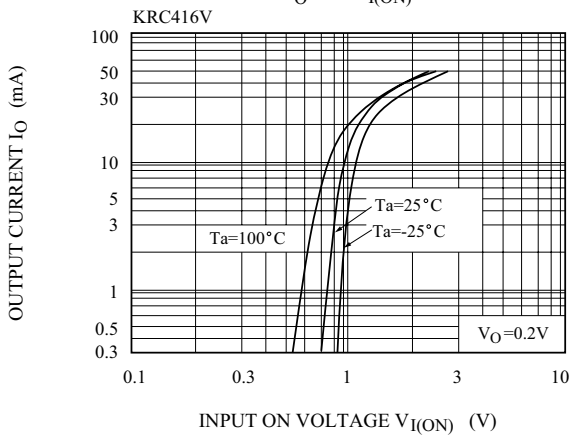


ELECTRICAL CHARACTERISTICS (Ta=25℃)

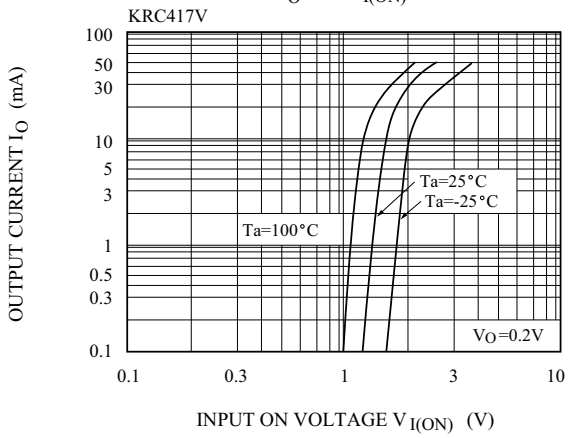
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC416V~422V	$I_{O(OFF)}$	V_O=50V, V_I=0	-	-	500	nA
DC Current Gain	KRC416V	G_I	V_O=5V, I_O=5mA	33	-	-	
	KRC417V		V_O=5V, I_O=20mA	20	-	-	
	KRC418V		V_O=5V, I_O=10mA	33	-	-	
	KRC419V		V_O=5V, I_O=10mA	30	-	-	
	KRC420V		V_O=5V, I_O=10mA	24	-	-	
	KRC421V		V_O=5V, I_O=5mA	33	-	-	
	KRC422V		V_O=5V, I_O=5mA	62	-	-	
Output Voltage	KRC416V	$V_{O(ON)}$	I_O=10mA, I_I=0.5mA	-	-	0.3	V
	KRC417V		I_O=10mA, I_I=0.5mA	-	0.1	0.3	
	KRC418V		I_O=10mA, I_I=0.5mA	-	-	0.3	
	KRC419V		I_O=10mA, I_I=0.5mA	-	0.1	0.3	
	KRC420V		I_O=10mA, I_I=0.5mA	-	0.1	0.3	
	KRC421V		I_O=10mA, I_I=0.5mA	-	0.1	0.3	
	KRC422V		I_O=5mA, I_I=0.25mA	-	0.1	0.3	
Input Voltage (ON)	KRC416V	$V_{I(ON)}$	V_O=0.3V, I_O=20mA	-	0.98	3	V
	KRC417V		V_O=0.3V, I_O=20mA	-	1.83	3	
	KRC418V		V_O=0.3V, I_O=20mA	-	1.22	3	
	KRC419V		V_O=0.3V, I_O=20mA	-	1.76	2.5	
	KRC420V		V_O=0.3V, I_O=2mA	-	2	3	
	KRC421V		V_O=0.3V, I_O=2mA	-	3.9	5	
	KRC422V		V_O=0.3V, I_O=1mA	-	1.64	3	
Input Voltage (OFF)	KRC416V	$V_{I(OFF)}$	V_{CC}=5V, I_O=100μA	0.3	0.63	-	V
	KRC417V			0.5	1.15	-	
	KRC418V			0.3	0.67	-	
	KRC419V			0.3	0.82	-	
	KRC420V			0.8	1.68	-	
	KRC421V			1	3.09	-	
	KRC422V			0.5	1.17	-	
Transition Frequency	KRC416V~422V	f_T*	V_O=10V, I_O=5mA	-	250	-	MHz
Input Current	KRC416V	I_I	V_I=5V	-	-	7.2	mA
	KRC417V			-	-	3.8	
	KRC418V			-	-	3.8	
	KRC419V			-	-	1.8	
	KRC420V			-	-	0.88	
	KRC421V			-	-	0.16	
	KRC422V			-	-	0.15	

Note : * Characteristic of Transistor Only.

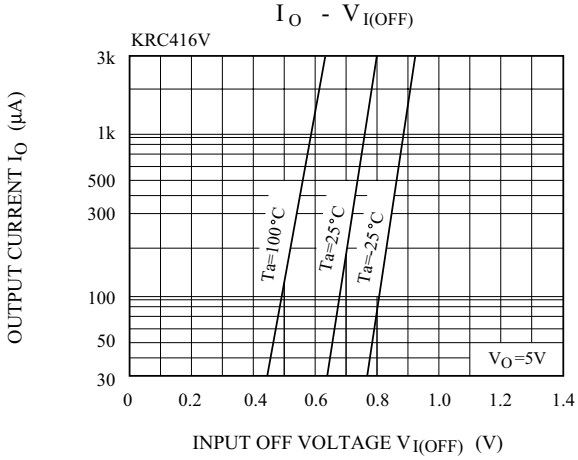
I_O - $V_{I(ON)}$



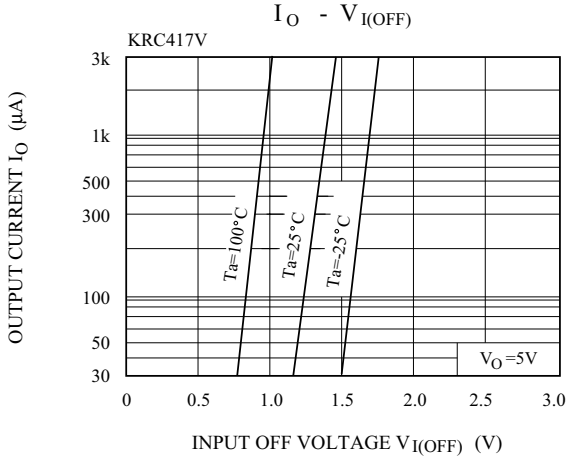
I_O - $V_{I(ON)}$



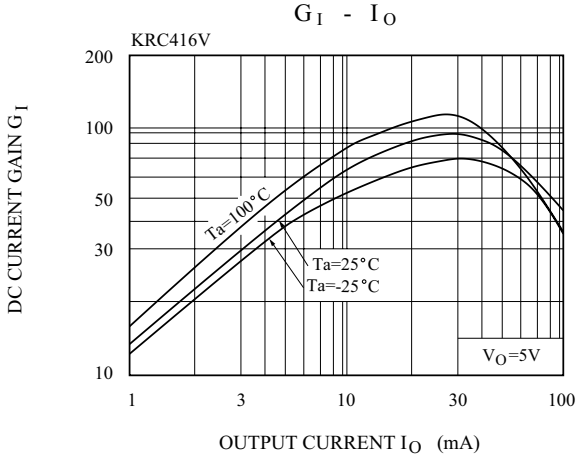
I_O - $V_{I(OFF)}$



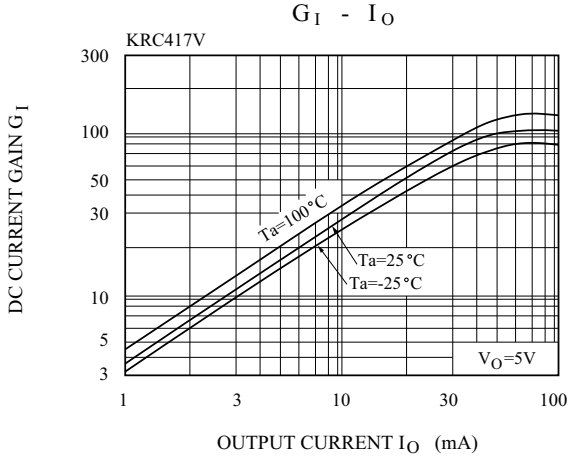
I_O - $V_{I(OFF)}$



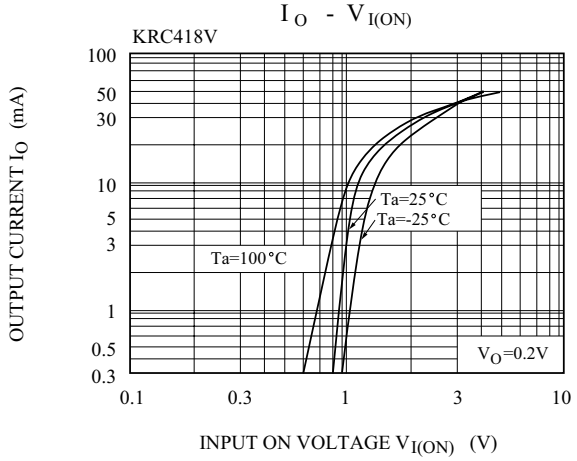
G_I - I_O



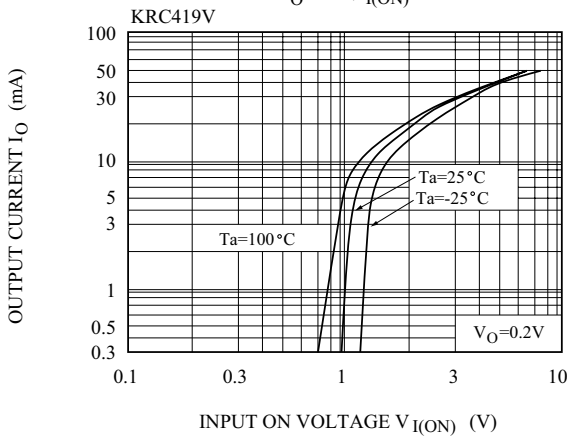
G_I - I_O



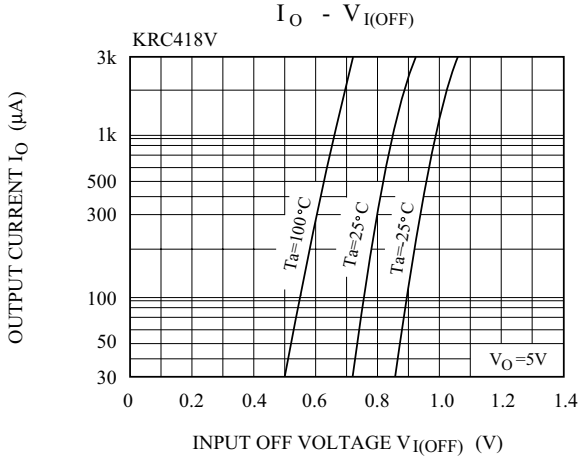
I_O - $V_{I(ON)}$



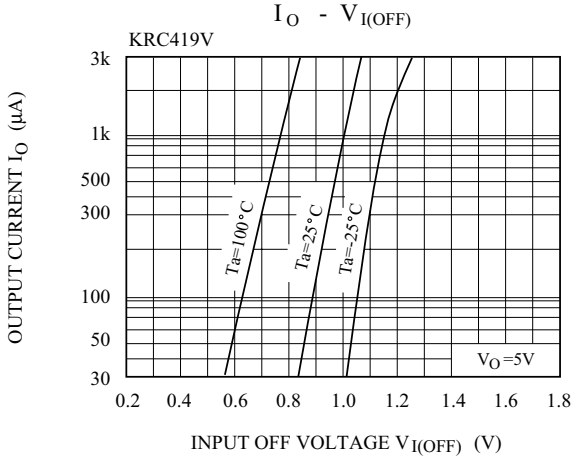
I_O - $V_{I(ON)}$



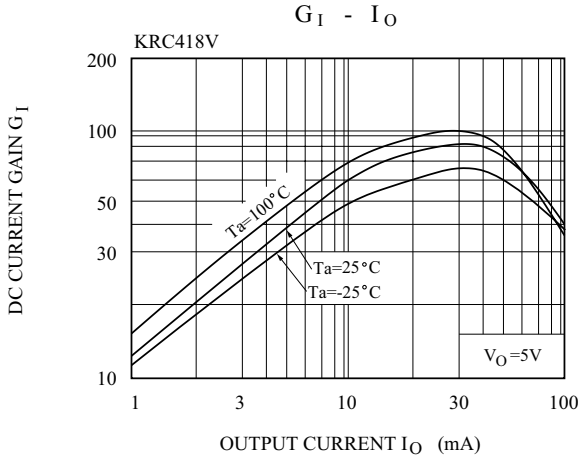
I_O - $V_{I(OFF)}$



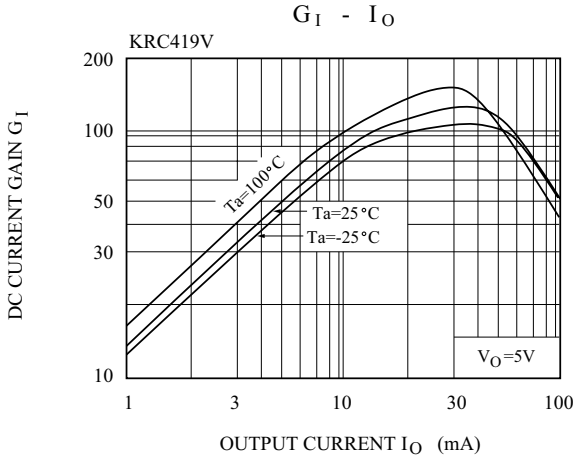
I_O - $V_{I(OFF)}$



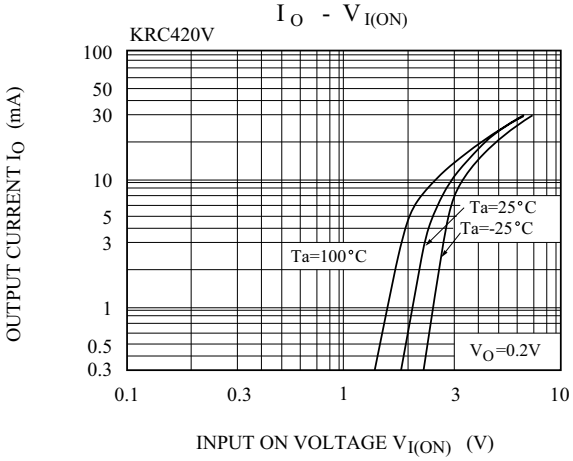
G_I - I_O



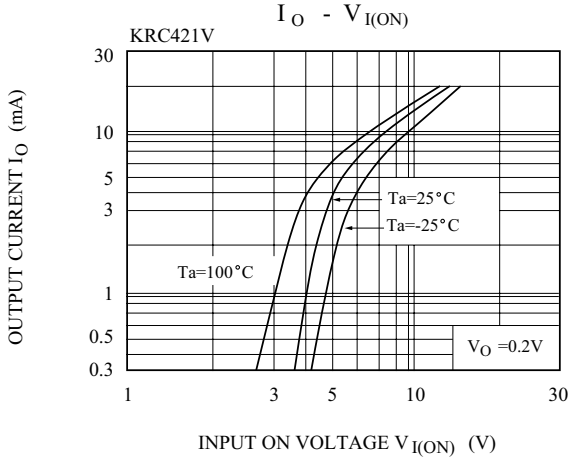
G_I - I_O



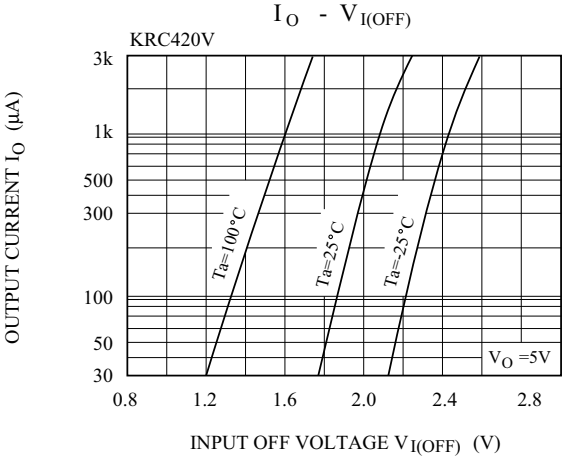
I_O - $V_{I(ON)}$



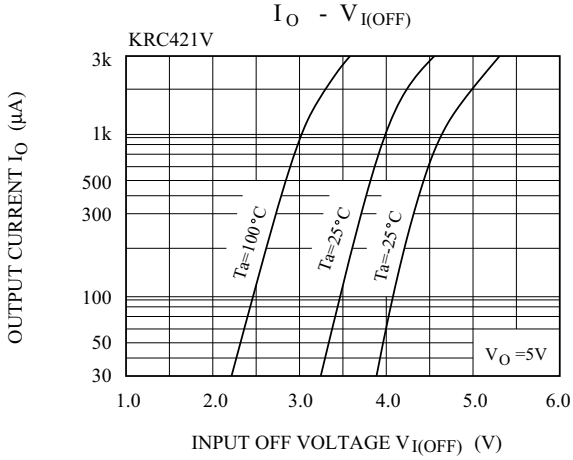
I_O - $V_{I(ON)}$



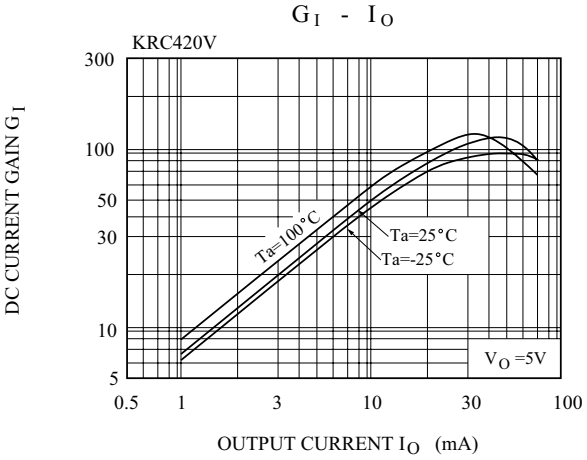
I_O - $V_{I(OFF)}$



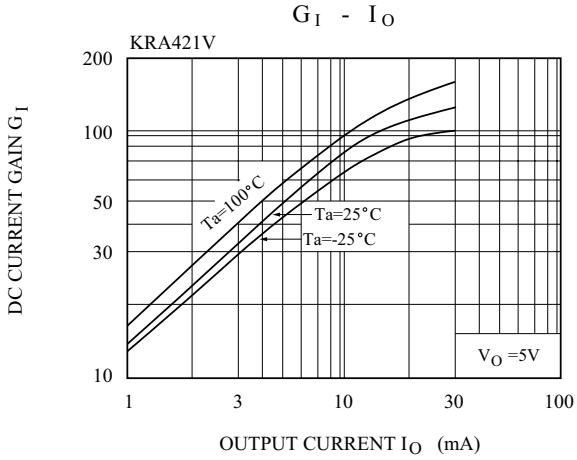
I_O - $V_{I(OFF)}$



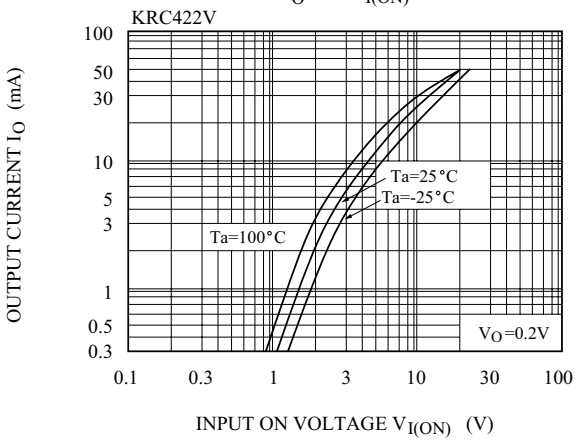
G_I - I_O



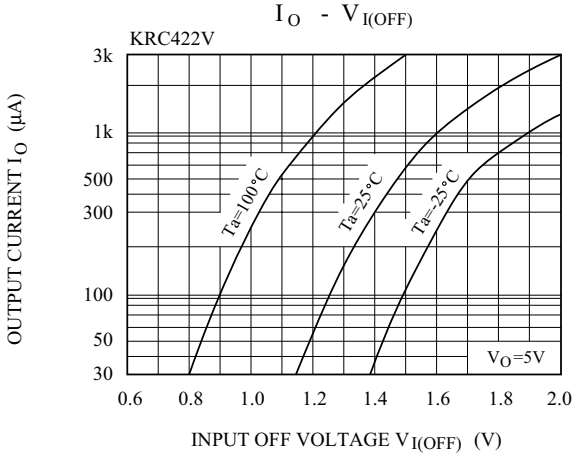
G_I - I_O



I_O - $V_{I(ON)}$



I_O - $V_{I(OFF)}$



G_I - I_O