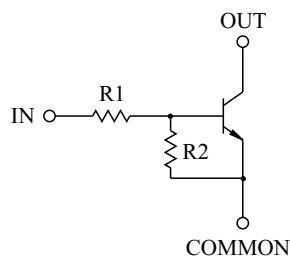


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

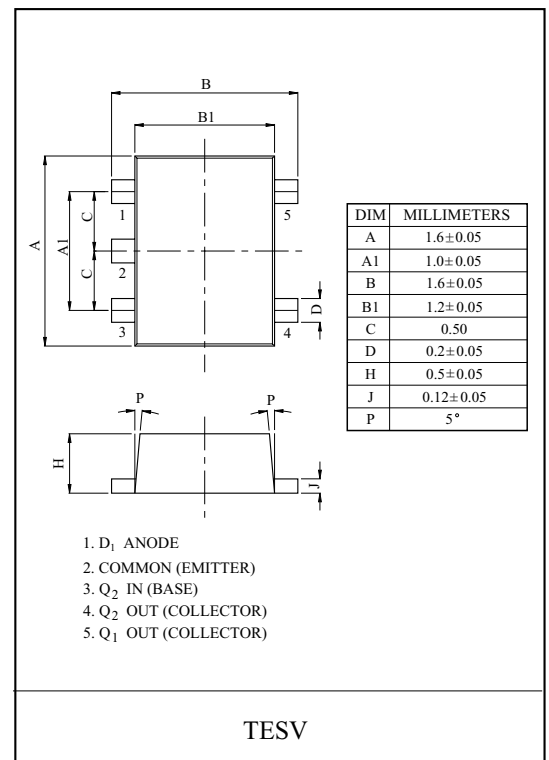
FEATURES

- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- Suffix U : Qualified to AEC-Q101.
ex) KRC666E-RTK/HU

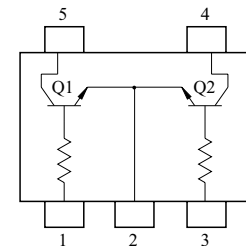
EQUIVALENT CIRCUIT



TYPE NO.	R1(k Ω)	R2(k Ω)
KRC666E	1	10
KRC667E	2.2	2.2
KRC668E	2.2	10
KRC669E	4.7	10
KRC670E	10	4.7
KRC671E	47	10
KRC672E	100	100



EQUIVALENT CIRCUIT (TOP VIEW)

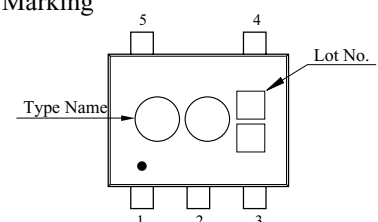


MAXIMUM RATING (Ta=25 °)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC666E~672E	V_O	50	V
Input Voltage	KRC666E	V_I	10, -5	V
	KRC667E		12, -10	
	KRC668E		12, -5	
	KRC669E		20, -7	
	KRC670E		30, -10	
	KRC671E		40, -15	
	KRC672E		40, -10	
Output Current	KRC666E~672E	I_O	100	mA
Power Dissipation		P_D *	200	mW
Junction Temperature		T_j	-55~150	
Storage Temperature Range		T_{stg}	-55~150	

* Total Rating.

Marking



MARK SPEC

TYPE	KRC666E	KRC667E	KRC668E	KRC669E	KRC670E	KRC671E	KRC672E
MARK	N2	N4	N5	N6	N7	N8	N9

KRC666E~KRC672E

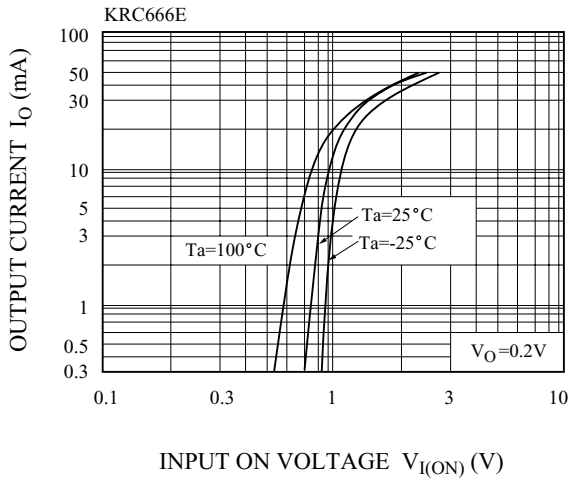
ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC666E~672E	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC666E	G_I	$V_O=5V, I_O=5mA$	33	-	-	
	KRC667E		$V_O=5V, I_O=20mA$	20	-	-	
	KRC668E		$V_O=5V, I_O=10mA$	33	-	-	
	KRC669E		$V_O=5V, I_O=10mA$	30	-	-	
	KRC670E		$V_O=5V, I_O=10mA$	24	-	-	
	KRC671E		$V_O=5V, I_O=5mA$	33	-	-	
	KRC672E		$V_O=5V, I_O=5mA$	62	-	-	
Output Voltage	KRC666E	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	-	0.3	V
	KRC667E		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC668E		$I_O=10mA, I_I=0.5mA$	-	-	0.3	
	KRC669E		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC670E		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC671E		$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	
	KRC672E		$I_O=5mA, I_I=0.25mA$	-	0.1	0.3	
Input Voltage (ON)	KRC666E	$V_{I(ON)}$	$V_O=0.3V, I_O=20mA$	-	0.98	3	V
	KRC667E		$V_O=0.3V, I_O=20mA$	-	1.83	3	
	KRC668E		$V_O=0.3V, I_O=20mA$	-	1.22	3	
	KRC669E		$V_O=0.3V, I_O=20mA$	-	1.76	2.5	
	KRC670E		$V_O=0.3V, I_O=2mA$	-	2	3	
	KRC671E		$V_O=0.3V, I_O=2mA$	-	3.9	5	
	KRC672E		$V_O=0.3V, I_O=1mA$	-	1.64	3	
Input Voltage (OFF)	KRC666E	$V_{I(OFF)}$	$V_{CC}=5V, I_O=100\mu A$	0.3	0.63	-	V
	KRC667E			0.5	1.15	-	
	KRC668E			0.3	0.67	-	
	KRC669E			0.3	0.82	-	
	KRC670E			0.8	1.68	-	
Input Resistor	KRC666U	R1	-	0.7	1	1.3	kΩ
	KRC667U			1.54	2.2	2.86	
	KRC668U			1.54	2.2	2.86	
	KRC669U			3.29	4.7	6.11	
	KRC670U			7	10	13	
	KRC671U			32.9	47	61.1	
	KRC672U			70	100	130	
Resistor Ratio	KRC666U	R2/R1	-	8	10	12	
	KRC667U			0.8	1.0	1.2	
	KRC668U			3.6	4.5	5.5	
	KRC669U			1.7	2.1	2.6	
	KRC670U			0.37	0.47	0.57	
	KRC671U			0.17	0.21	0.26	
	KRC672U			0.8	1.0	1.2	

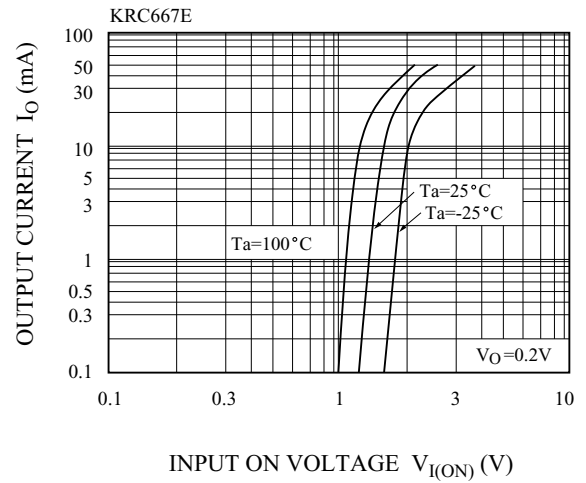
Note : * Characteristic of Transistor Only.

KRC666E~KRC672E

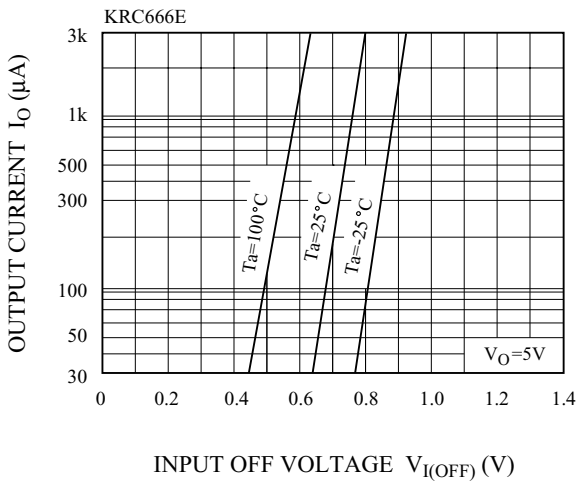
$I_O - V_{I(ON)}$



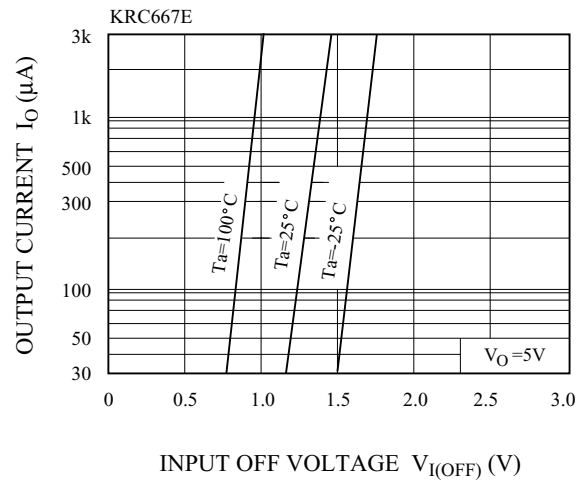
$I_O - V_{I(ON)}$



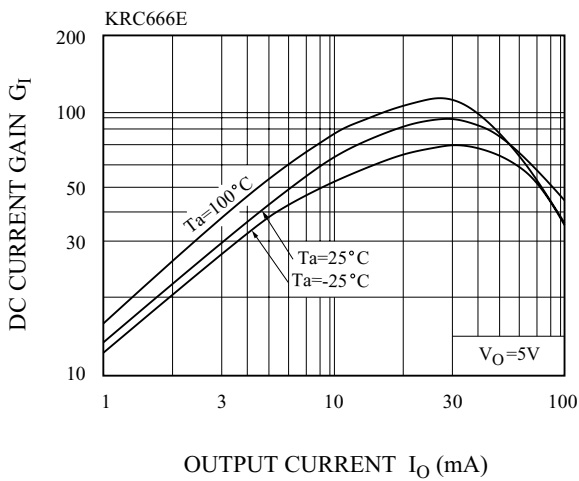
$I_O - V_{I(OFF)}$



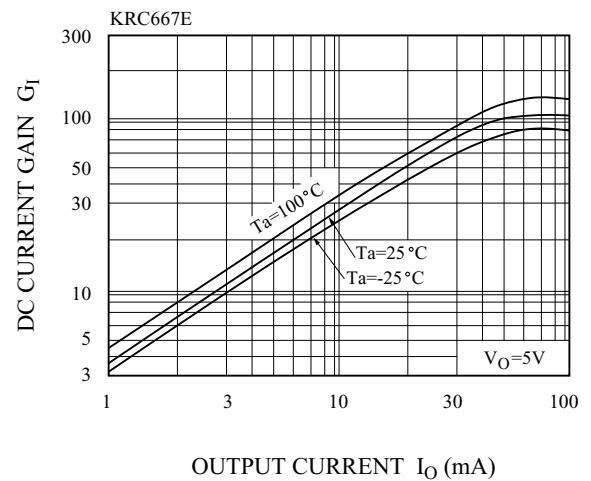
$I_O - V_{I(OFF)}$



$G_I - I_O$

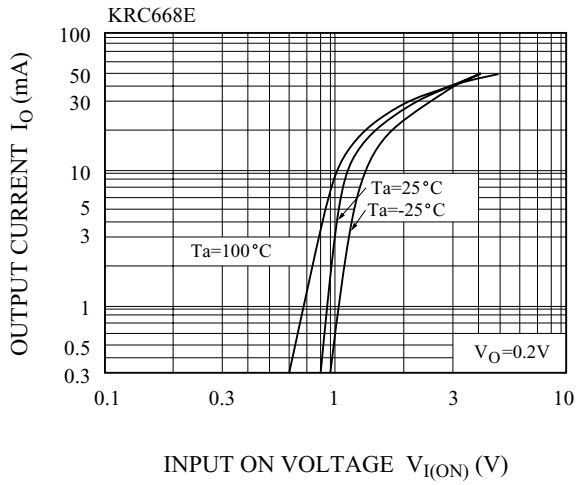


$G_I - I_O$

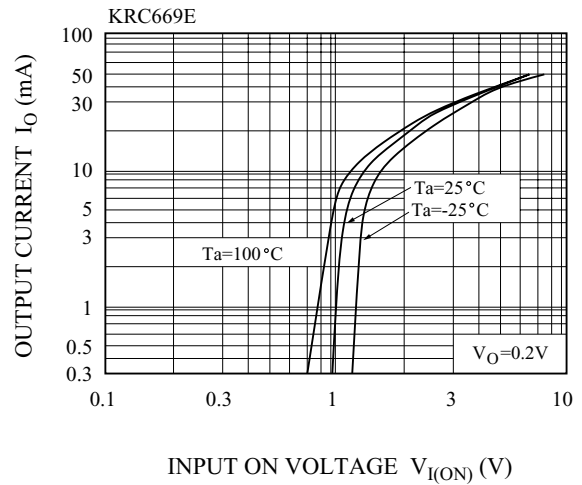


KRC666E~KRC672E

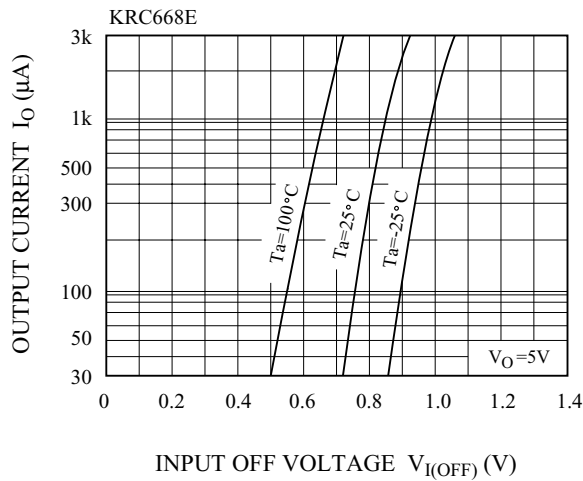
$I_O - V_{I(ON)}$



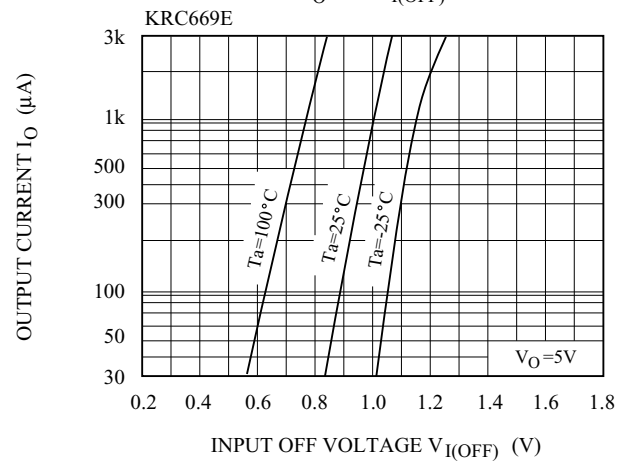
$I_O - V_{I(ON)}$



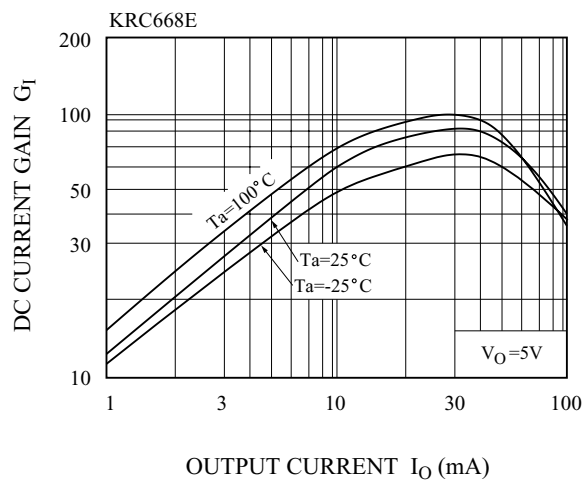
$I_O - V_{I(OFF)}$



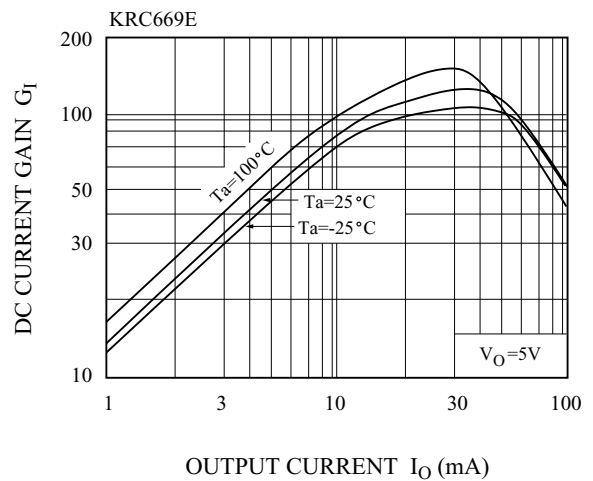
$I_O - V_{I(OFF)}$



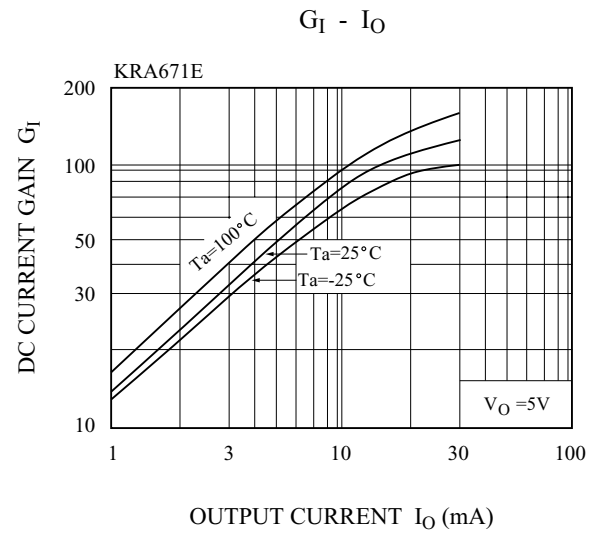
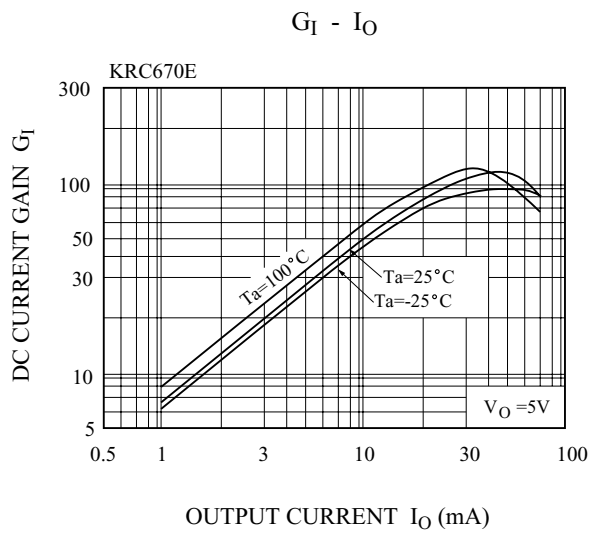
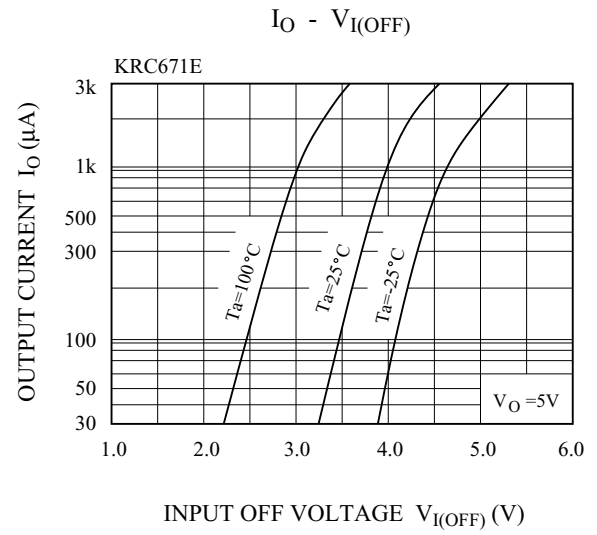
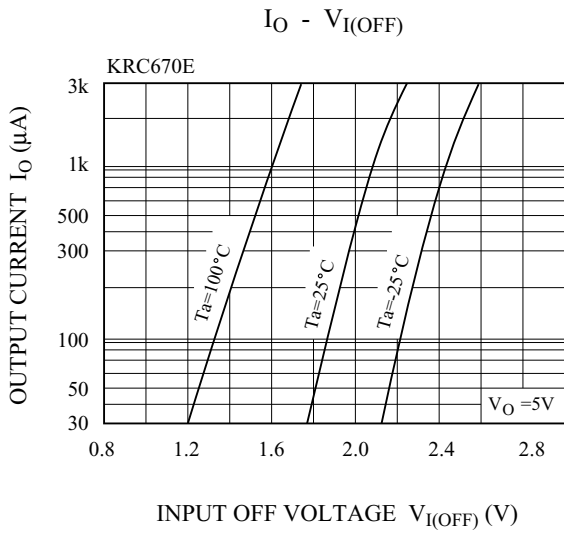
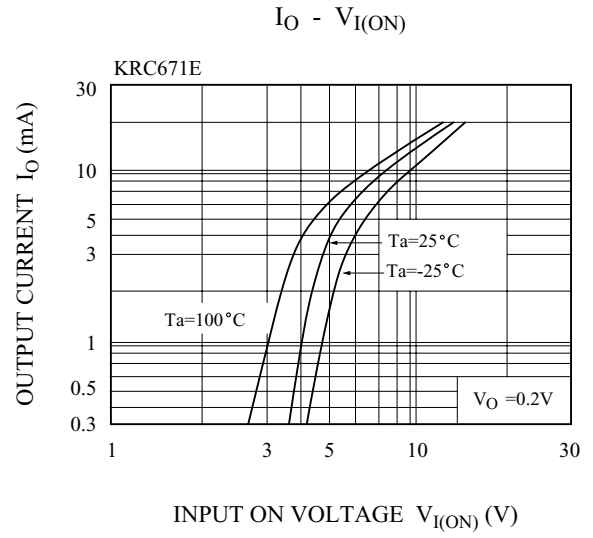
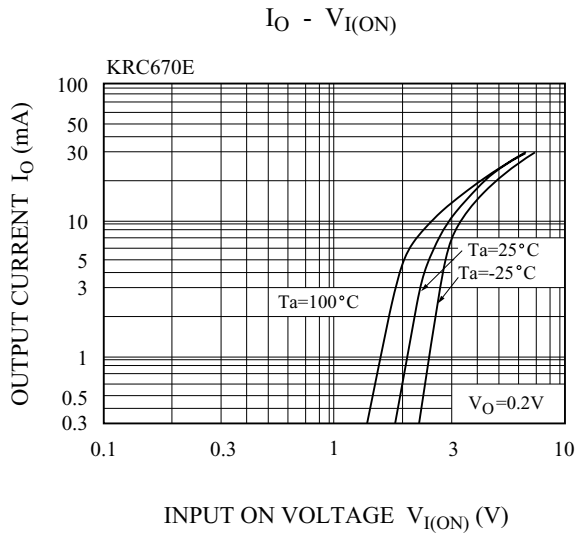
$G_I - I_O$



$G_I - I_O$

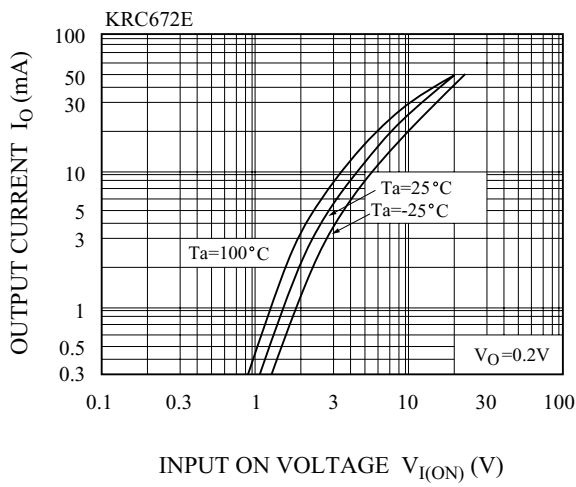


KRC666E~KRC672E

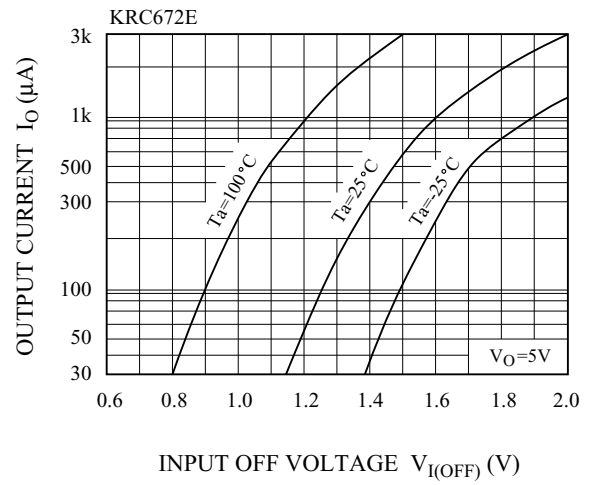


KRC666E~KRC672E

$I_O - V_{I(ON)}$



$I_O - V_{I(OFF)}$



$G_I - I_O$

