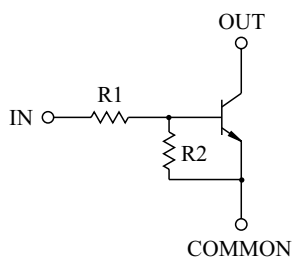


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

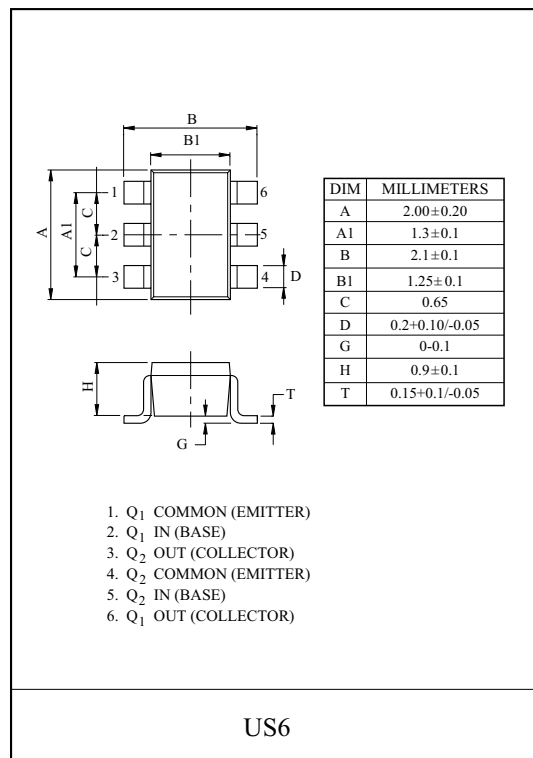
### FEATURES

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

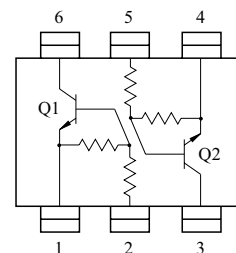
### EQUIVALENT CIRCUIT



| TYPE NO. | R1(k $\Omega$ ) | R2(k $\Omega$ ) |
|----------|-----------------|-----------------|
| KRC866U  | 1               | 10              |
| KRC867U  | 2.2             | 2.2             |
| KRC868U  | 2.2             | 10              |
| KRC869U  | 4.7             | 10              |
| KRC870U  | 10              | 4.7             |
| KRC871U  | 47              | 10              |
| KRC872U  | 100             | 100             |



### EQUIVALENT CIRCUIT (TOP VIEW)



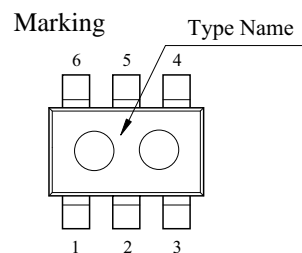
### MAXIMUM RATING (Ta=25℃)

| CHARACTERISTIC            |              | SYMBOL           | RATING    | UNIT |
|---------------------------|--------------|------------------|-----------|------|
| Output Voltage            | KRC866U~872U | V <sub>O</sub>   | 50        | V    |
| Input Voltage             | KRC866U      | V <sub>I</sub>   | 10, -5    | V    |
|                           | KRC867U      |                  | 12, -10   |      |
|                           | KRC868U      |                  | 12, -5    |      |
|                           | KRC869U      |                  | 20, -7    |      |
|                           | KRC870U      |                  | 30, -10   |      |
|                           | KRC871U      |                  | 40, -15   |      |
|                           | KRC872U      |                  | 40, -10   |      |
| Output Current            | KRC866U~872U | I <sub>O</sub>   | 100       | mA   |
| Power Dissipation         |              | P <sub>D</sub> * | 200       | mW   |
| Junction Temperature      |              | T <sub>j</sub>   | 150       | ℃    |
| Storage Temperature Range |              | T <sub>stg</sub> | -55 ~ 150 | ℃    |

\* Total Rating.

### MARK SPEC

| TYPE | KRC866U | KRC867U | KRC868U | KRC869U | KRC870U | KRC871U | KRC872U |
|------|---------|---------|---------|---------|---------|---------|---------|
| MARK | N2      | N4      | N5      | N6      | N7      | N8      | N9      |



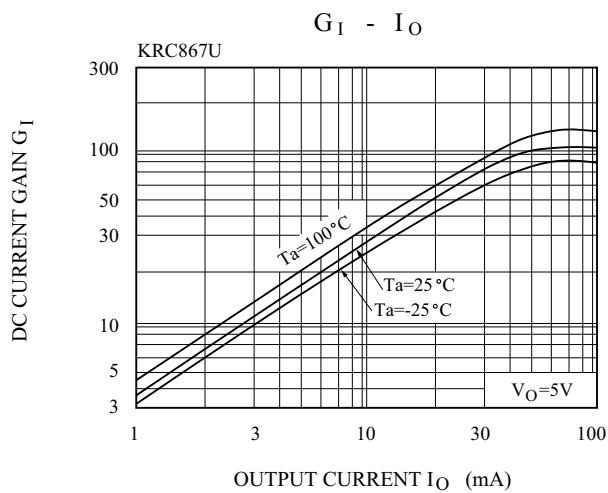
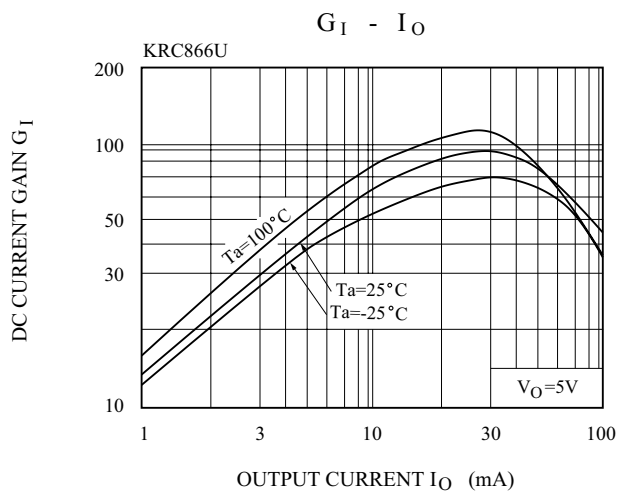
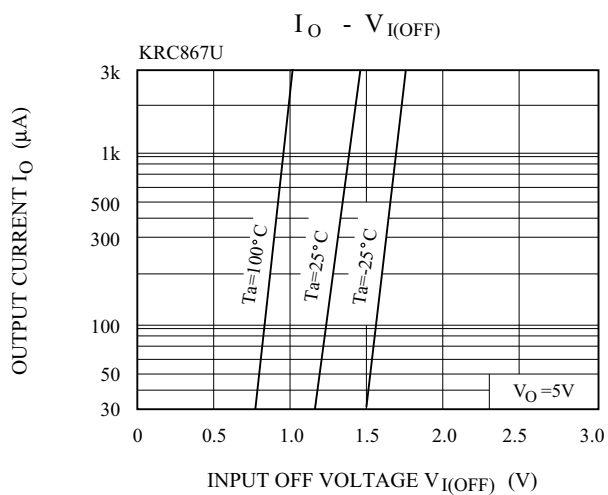
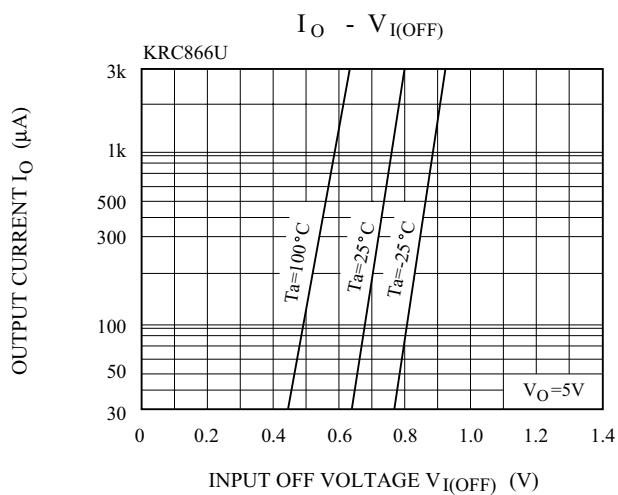
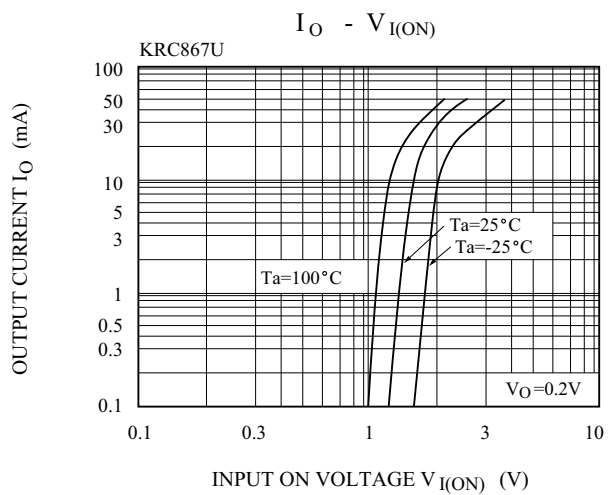
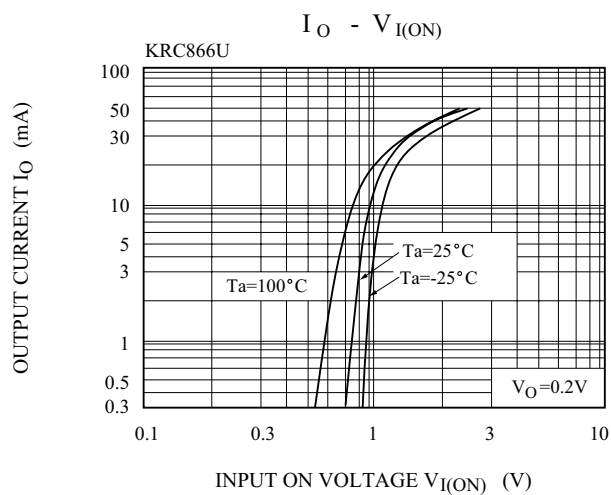
# KRC866U~KRC872U

## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

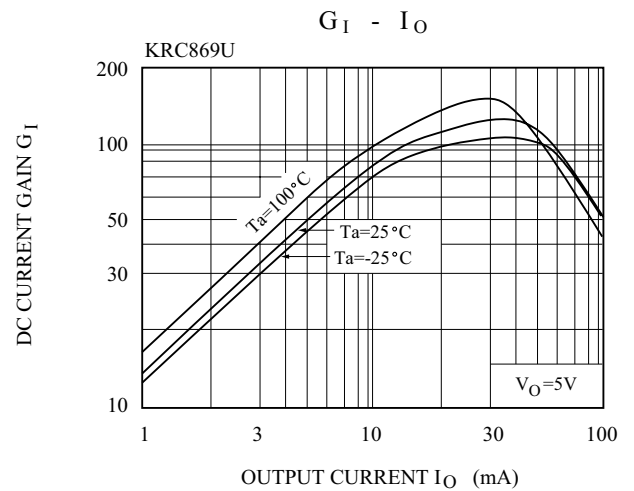
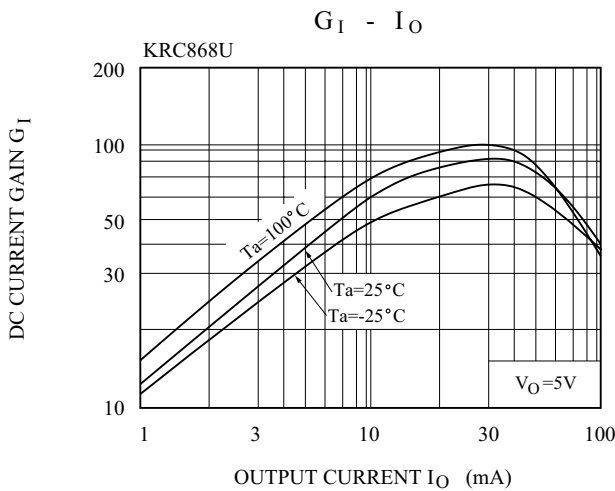
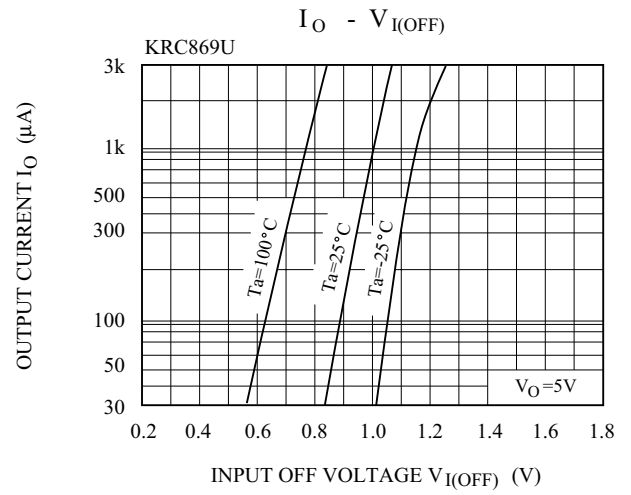
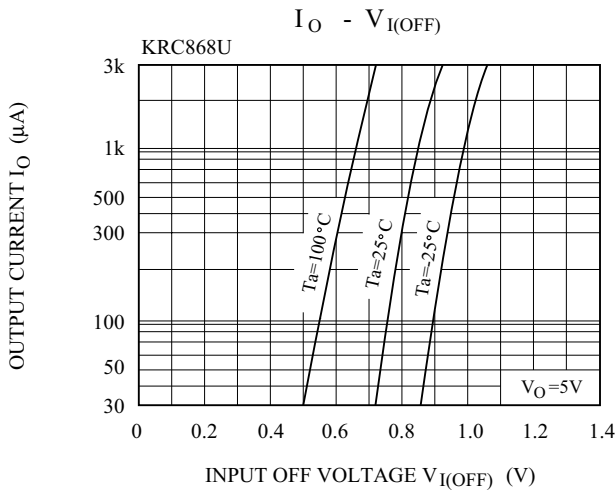
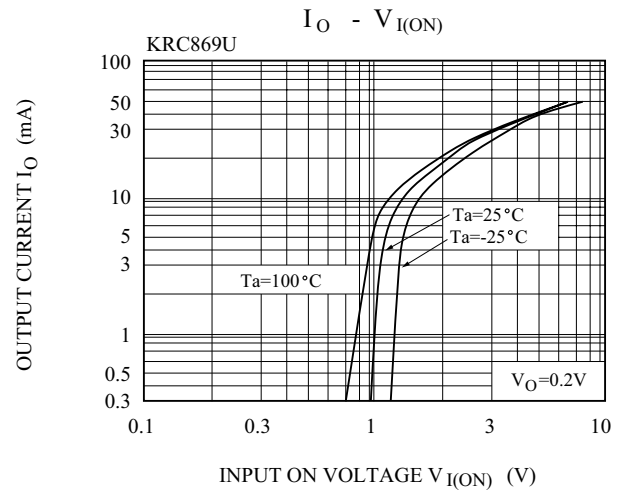
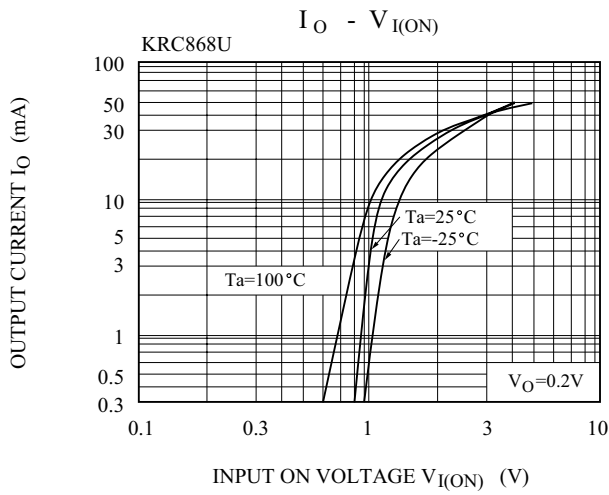
| CHARACTERISTIC         |              | SYMBOL       | TEST CONDITION            | MIN. | TYP. | MAX. | UNIT |
|------------------------|--------------|--------------|---------------------------|------|------|------|------|
| Output Cut-off Current | KRC866U~872U | $I_{O(OFF)}$ | $V_O=50V, V_I=0$          | -    | -    | 500  | nA   |
| DC Current Gain        | KRC866U      | $G_I$        | $V_O=5V, I_O=5mA$         | 33   | -    | -    |      |
|                        | KRC867U      |              | $V_O=5V, I_O=20mA$        | 20   | -    | -    |      |
|                        | KRC868U      |              | $V_O=5V, I_O=10mA$        | 33   | -    | -    |      |
|                        | KRC869U      |              | $V_O=5V, I_O=10mA$        | 30   | -    | -    |      |
|                        | KRC870U      |              | $V_O=5V, I_O=10mA$        | 24   | -    | -    |      |
|                        | KRC871U      |              | $V_O=5V, I_O=5mA$         | 33   | -    | -    |      |
|                        | KRC872U      |              | $V_O=5V, I_O=5mA$         | 62   | -    | -    |      |
| Output Voltage         | KRC866U      | $V_{O(ON)}$  | $I_O=10mA, I_I=0.5mA$     | -    | -    | 0.3  | V    |
|                        | KRC867U      |              | $I_O=10mA, I_I=0.5mA$     | -    | 0.1  | 0.3  |      |
|                        | KRC868U      |              | $I_O=10mA, I_I=0.5mA$     | -    | -    | 0.3  |      |
|                        | KRC869U      |              | $I_O=10mA, I_I=0.5mA$     | -    | 0.1  | 0.3  |      |
|                        | KRC870U      |              | $I_O=10mA, I_I=0.5mA$     | -    | 0.1  | 0.3  |      |
|                        | KRC871U      |              | $I_O=10mA, I_I=0.5mA$     | -    | 0.1  | 0.3  |      |
|                        | KRC872U      |              | $I_O=5mA, I_I=0.25mA$     | -    | 0.1  | 0.3  |      |
| Input Voltage (ON)     | KRC866U      | $V_{I(ON)}$  | $V_O=0.3V, I_O=20mA$      | -    | 0.98 | 3    | V    |
|                        | KRC867U      |              | $V_O=0.3V, I_O=20mA$      | -    | 1.83 | 3    |      |
|                        | KRC868U      |              | $V_O=0.3V, I_O=20mA$      | -    | 1.22 | 3    |      |
|                        | KRC869U      |              | $V_O=0.3V, I_O=20mA$      | -    | 1.76 | 2.5  |      |
|                        | KRC870U      |              | $V_O=0.3V, I_O=2mA$       | -    | 2    | 3    |      |
|                        | KRC871U      |              | $V_O=0.3V, I_O=2mA$       | -    | 3.9  | 5    |      |
|                        | KRC872U      |              | $V_O=0.3V, I_O=1mA$       | -    | 1.64 | 3    |      |
| Input Voltage (OFF)    | KRC866U      | $V_{I(OFF)}$ | $V_{CC}=5V, I_O=100\mu A$ | 0.3  | 0.63 | -    | V    |
|                        | KRC867U      |              |                           | 0.5  | 1.15 | -    |      |
|                        | KRC868U      |              |                           | 0.3  | 0.67 | -    |      |
|                        | KRC869U      |              |                           | 0.3  | 0.82 | -    |      |
|                        | KRC870U      |              |                           | 0.8  | 1.68 | -    |      |
|                        | KRC871U      |              |                           | 1    | 3.09 | -    |      |
|                        | KRC872U      |              |                           | 0.5  | 1.17 | -    |      |
| Transition Frequency   | KRC866U~872U | $f_T^*$      | $V_O=10V, I_O=5mA$        | -    | 250  | -    | MHz  |
| Input Current          | KRC866U      | $I_I$        | $V_I=5V$                  | -    | -    | 7.2  | mA   |
|                        | KRC867U      |              |                           | -    | -    | 3.8  |      |
|                        | KRC868U      |              |                           | -    | -    | 3.8  |      |
|                        | KRC869U      |              |                           | -    | -    | 1.8  |      |
|                        | KRC870U      |              |                           | -    | -    | 0.88 |      |
|                        | KRC871U      |              |                           | -    | -    | 0.16 |      |
|                        | KRC872U      |              |                           | -    | -    | 0.15 |      |

Note : \* Characteristic of Transistor Only.

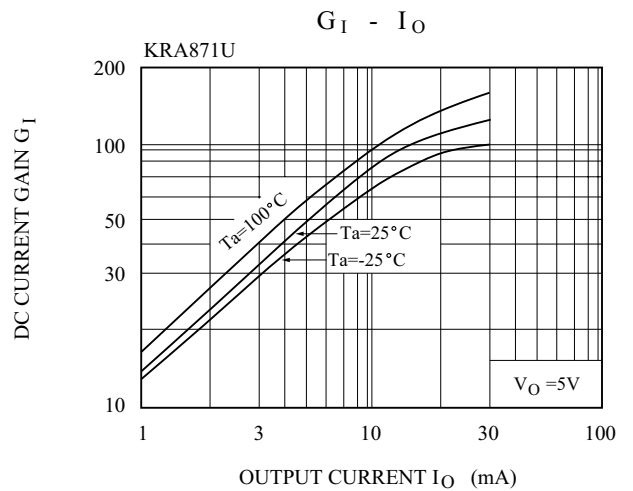
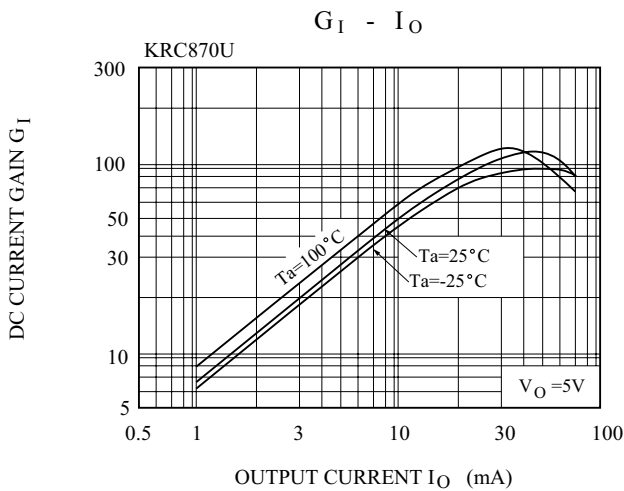
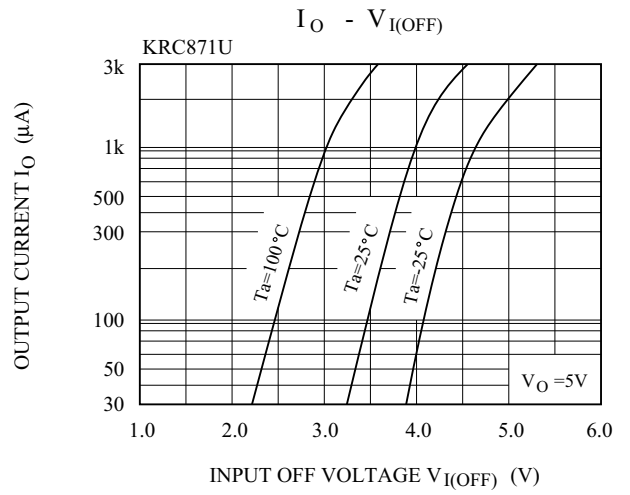
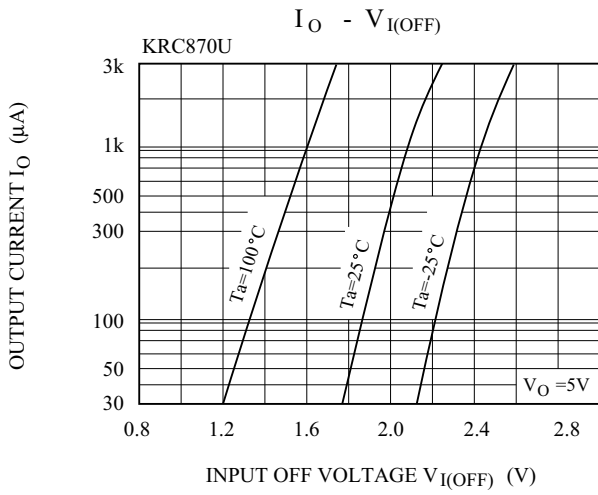
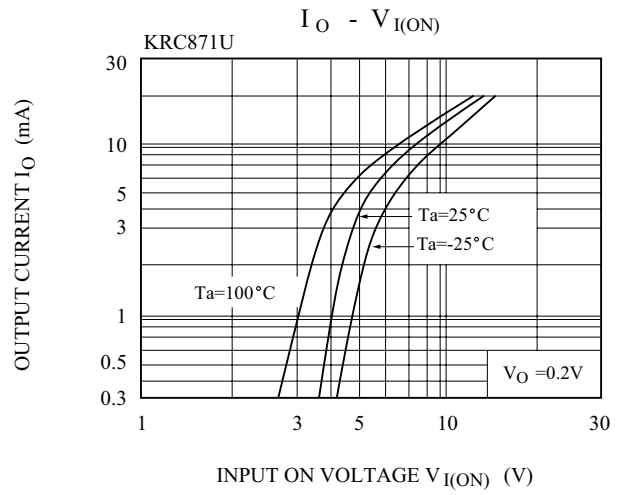
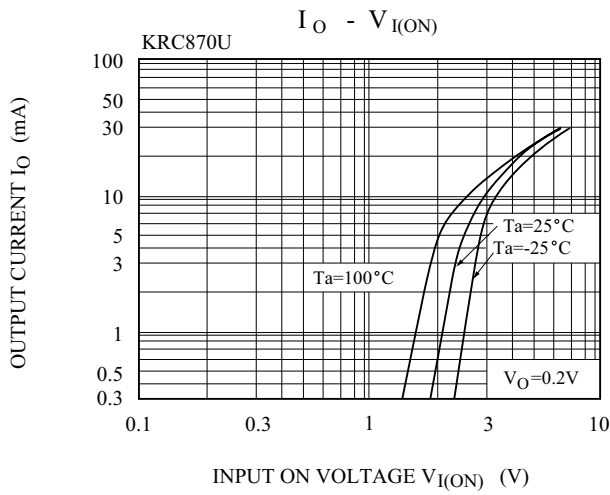
# KRC866U~KRC872U



# KRC866U~KRC872U



# KRC866U~KRC872U



# KRC866U~KRC872U

