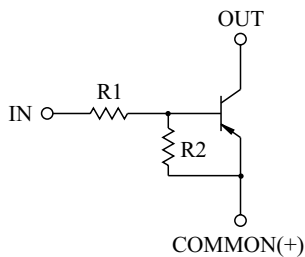


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

FEATURES

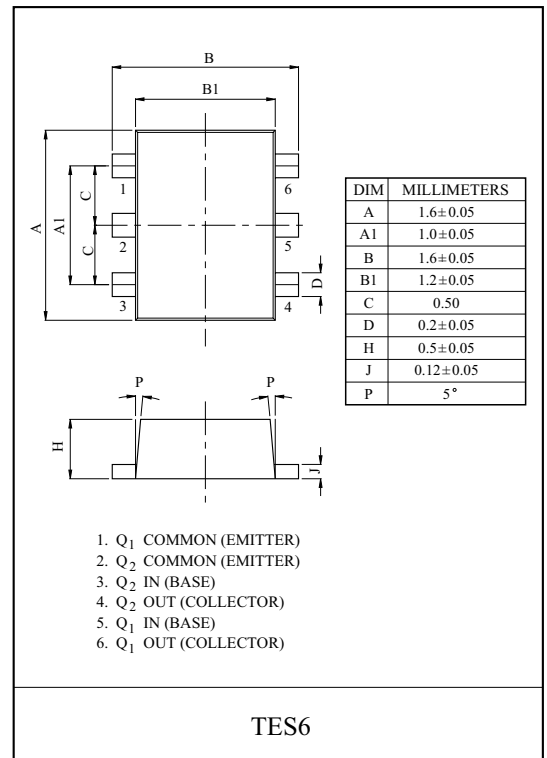
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

EQUIVALENT CIRCUIT

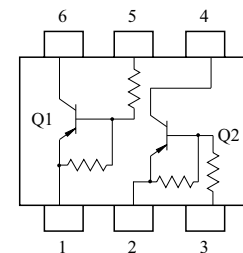


BIAS RESISTOR VALUES

| TYPE NO. | R1(k Ω) | R2(k Ω) |
|----------|-----------------|-----------------|
| KRA736E | 1 | 10 |
| KRA737E | 2.2 | 2.2 |
| KRA738E | 2.2 | 10 |
| KRA739E | 4.7 | 10 |
| KRA740E | 10 | 4.7 |
| KRA741E | 47 | 10 |
| KRA742E | 100 | 100 |



EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25 °C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|---------------------------|---------------|------------------|-----------|------|
| Output Voltage | KRA736E ~742E | V _O | -50 | V |
| Input Voltage | KRA736E | V _I | -10, 5 | V |
| | KRA737E | | -12, 10 | |
| | KRA738E | | -12, 5 | |
| | KRA739E | | -20, 7 | |
| | KRA740E | | -30, 10 | |
| | KRA741E | | -40, 15 | |
| | KRA742E | | -40, 10 | |
| Output Current | KRA736E ~742E | I _O | -100 | mA |
| Power Dissipation | | P _D * | 200 | mW |
| Junction Temperature | | T _j | 150 | °C |
| Storage Temperature Range | | T _{stg} | -55 ~ 150 | °C |

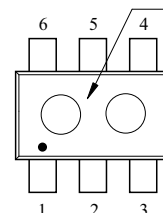
* : Total Rating.

MARK SPEC

| TYPE | KRA736E | KRA737E | KRA738E | KRA739E | KRA740E | KRA741E | KRA742E |
|------|---------|---------|---------|---------|---------|---------|---------|
| MARK | J2 | J4 | J5 | J6 | J7 | J8 | J9 |

Marking

Type Name



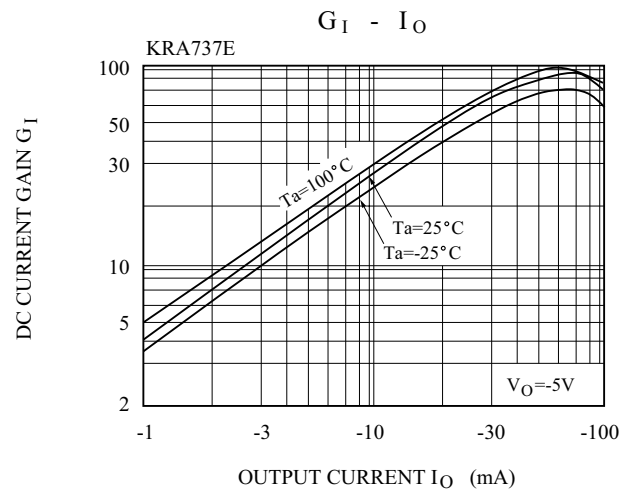
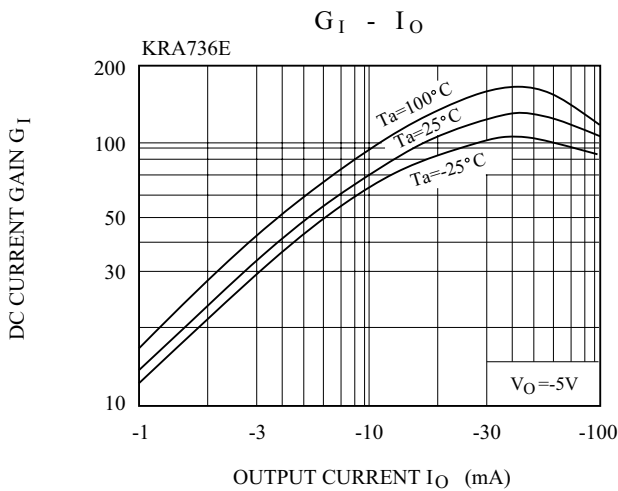
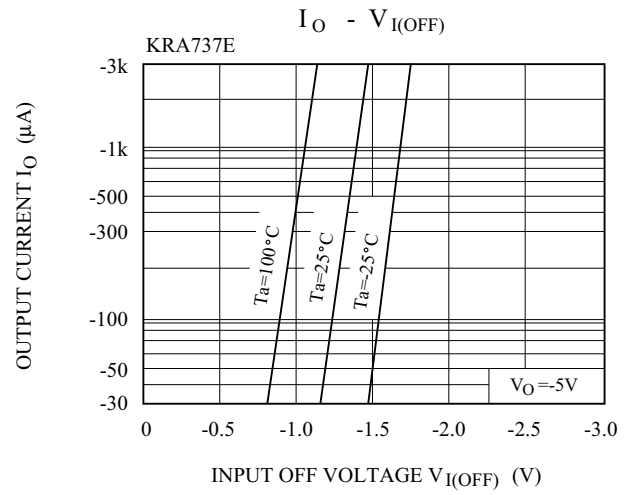
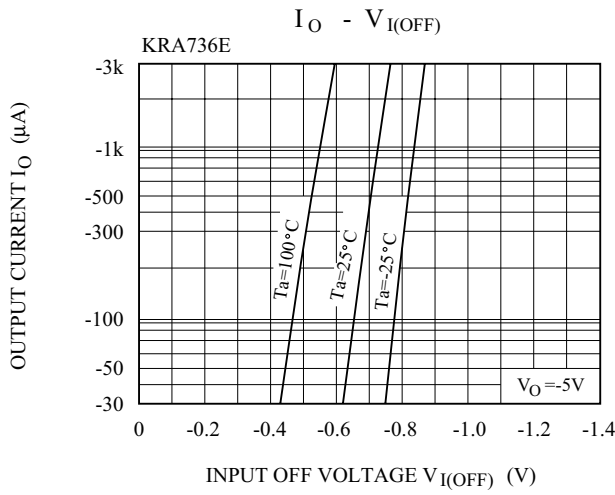
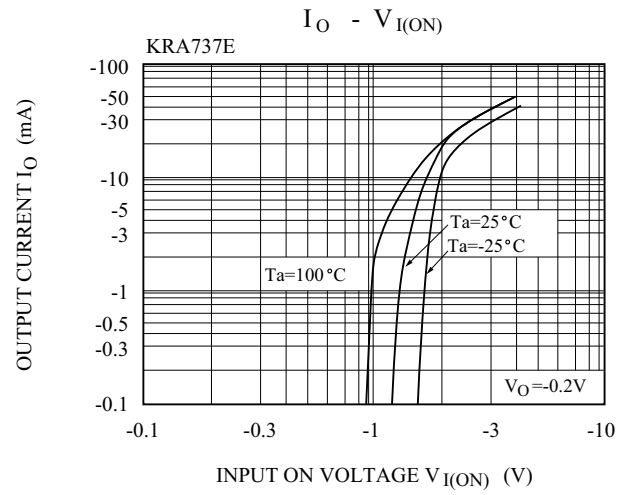
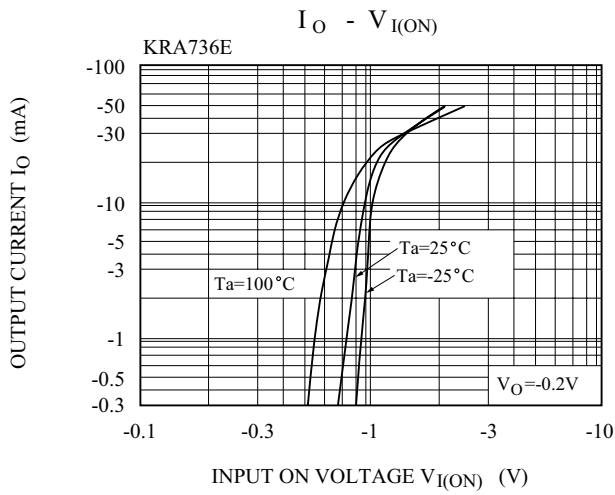
KRA736E~KRA742E

ELECTRICAL CHARACTERISTICS (Ta=25℃)

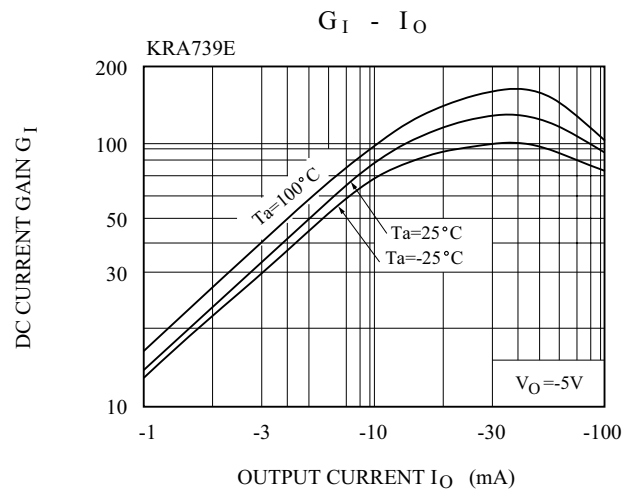
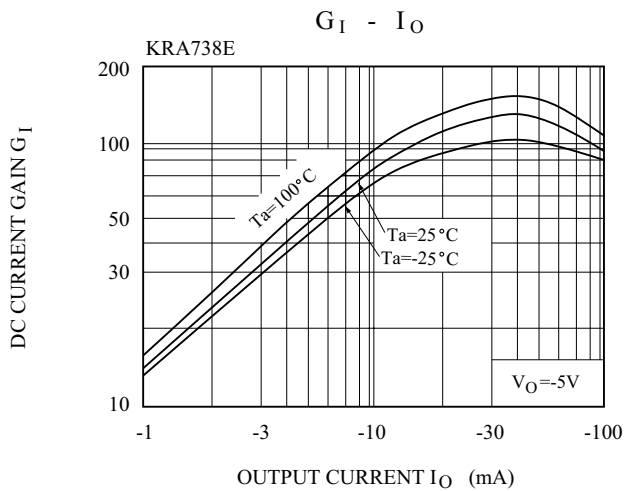
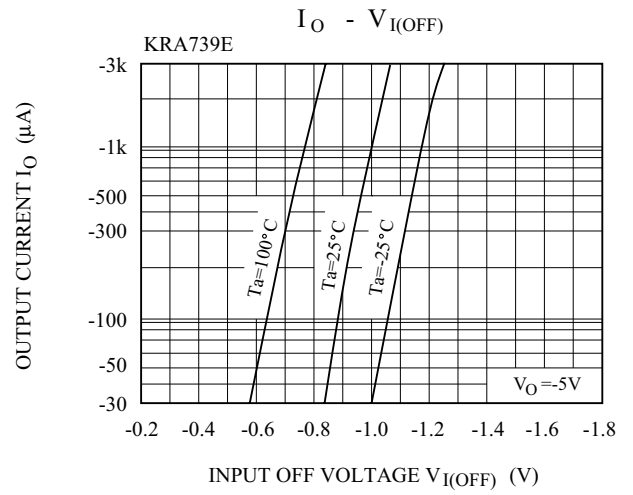
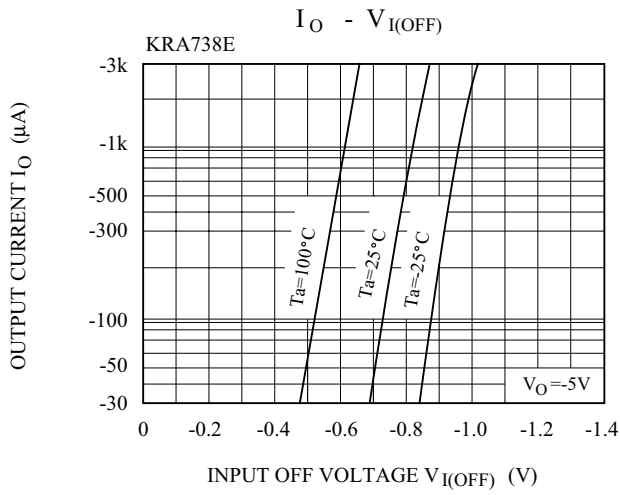
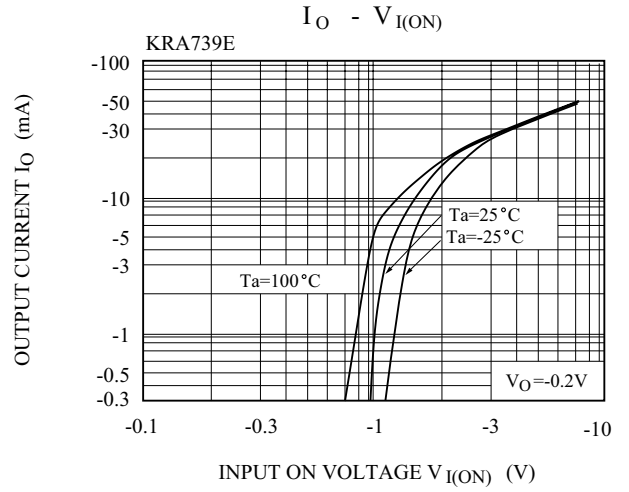
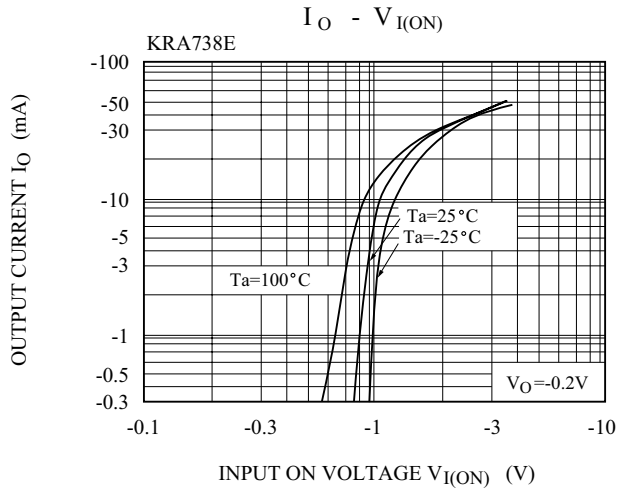
| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|------------------------|----------------|--------------|---------------------------------|------|-------|-------|------|
| Output Cut-off Current | KRA736E ~ 742E | $I_{O(OFF)}$ | $V_O = -50V, V_I = 0$ | - | - | -500 | nA |
| DC Current Gain | KRA736E | G_I | $V_O = -5V, I_O = -5mA$ | 33 | - | - | |
| | KRA737E | | $V_O = -5V, I_O = -20mA$ | 20 | - | - | |
| | KRA738E | | $V_O = -5V, I_O = -10mA$ | 33 | - | - | |
| | KRA739E | | $V_O = -5V, I_O = -10mA$ | 30 | - | - | |
| | KRA740E | | $V_O = -5V, I_O = -10mA$ | 24 | - | - | |
| | KRA741E | | $V_O = -5V, I_O = -5mA$ | 33 | - | - | |
| | KRA742E | | $V_O = -5V, I_O = -5mA$ | 62 | - | - | |
| Output Voltage | KRA736E | $V_{O(ON)}$ | $I_O = -10mA, I_I = -0.5mA$ | - | - | -0.3 | V |
| | KRA737E | | $I_O = -10mA, I_I = -0.5mA$ | - | -0.1 | -0.3 | |
| | KRA738E | | $I_O = -10mA, I_I = -0.5mA$ | - | - | -0.3 | |
| | KRA739E | | $I_O = -10mA, I_I = -0.5mA$ | - | -0.1 | -0.3 | |
| | KRA740E | | $I_O = -10mA, I_I = -0.5mA$ | - | -0.1 | -0.3 | |
| | KRA741E | | $I_O = -10mA, I_I = -0.5mA$ | - | -0.1 | -0.3 | |
| | KRA742E | | $I_O = -5mA, I_I = -0.25mA$ | - | -0.1 | -0.3 | |
| Input Voltage (ON) | KRA736E | $V_{I(ON)}$ | $V_O = -0.3V, I_O = -20mA$ | - | -0.98 | -3 | V |
| | KRA737E | | $V_O = -0.3V, I_O = -20mA$ | - | -1.83 | -3 | |
| | KRA738E | | $V_O = -0.3V, I_O = -20mA$ | - | -1.22 | -3 | |
| | KRA739E | | $V_O = -0.3V, I_O = -20mA$ | - | -1.76 | -2.5 | |
| | KRA740E | | $V_O = -0.3V, I_O = -2mA$ | - | -2 | -3 | |
| | KRA741E | | $V_O = -0.3V, I_O = -2mA$ | - | -3.9 | -5 | |
| | KRA742E | | $V_O = -0.3V, I_O = -1mA$ | - | -1.64 | -3 | |
| Input Voltage (OFF) | KRA736E | $V_{I(OFF)}$ | $V_{CC} = -5V, I_O = -100\mu A$ | -0.3 | -0.63 | - | V |
| | KRA737E | | | -0.5 | -1.15 | - | |
| | KRA738E | | | -0.3 | -0.67 | - | |
| | KRA739E | | | -0.3 | -0.82 | - | |
| | KRA740E | | | -0.8 | -1.68 | - | |
| | KRA741E | | | -1 | -3.09 | - | |
| | KRA742E | | | -0.5 | -1.17 | - | |
| Transition Frequency | KRA736E ~ 742E | f_T^* | $V_O = -10V, I_O = -5mA$ | - | 250 | - | MHz |
| Input Current | KRA736E | I_I | $V_I = -5V$ | - | - | -7.2 | mA |
| | KRA737E | | | - | - | -3.8 | |
| | KRA738E | | | - | - | -3.8 | |
| | KRA739E | | | - | - | -1.8 | |
| | KRA740E | | | - | - | -0.88 | |
| | KRA741E | | | - | - | -0.16 | |
| | KRA742E | | | - | - | -0.15 | |

Note : * Characteristic of Transistor Only.

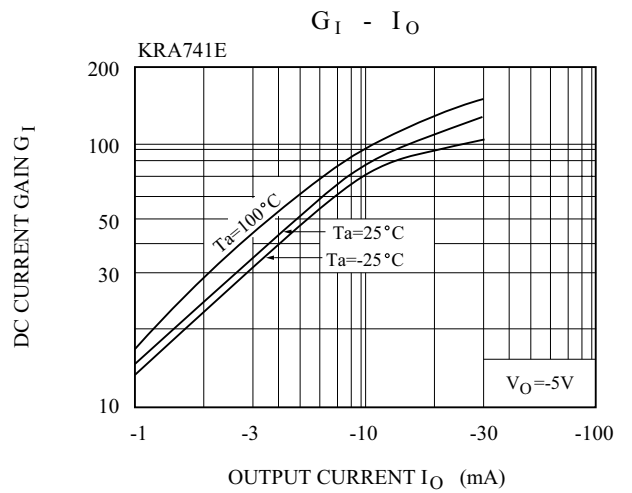
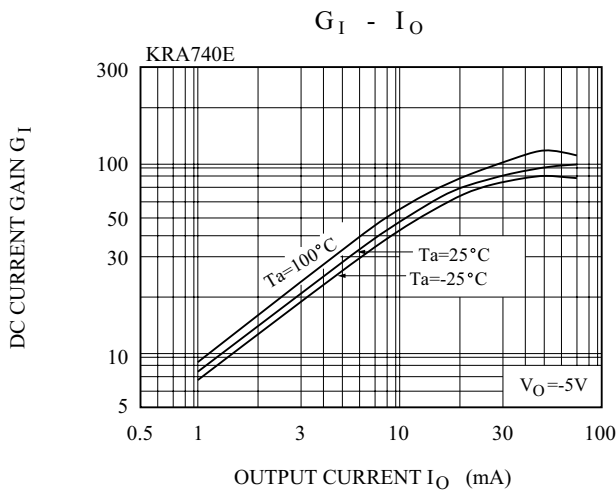
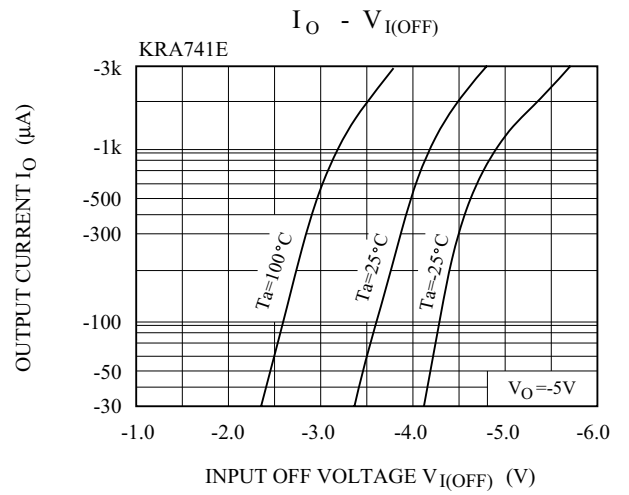
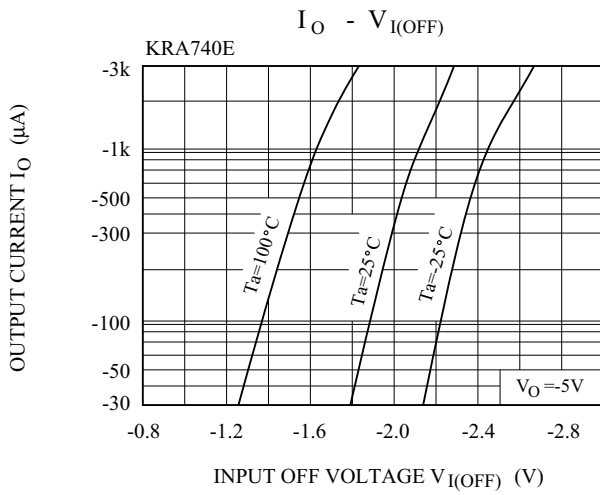
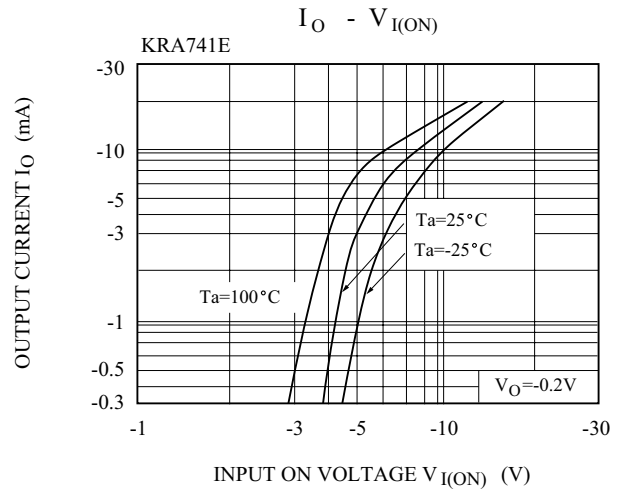
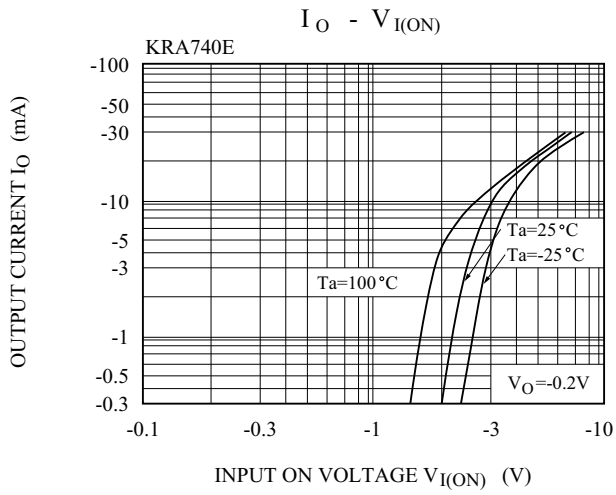
KRA736E~KRA742E



KRA736E~KRA742E



KRA736E~KRA742E



KRA736E~KRA742E

