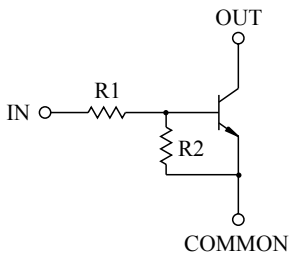


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

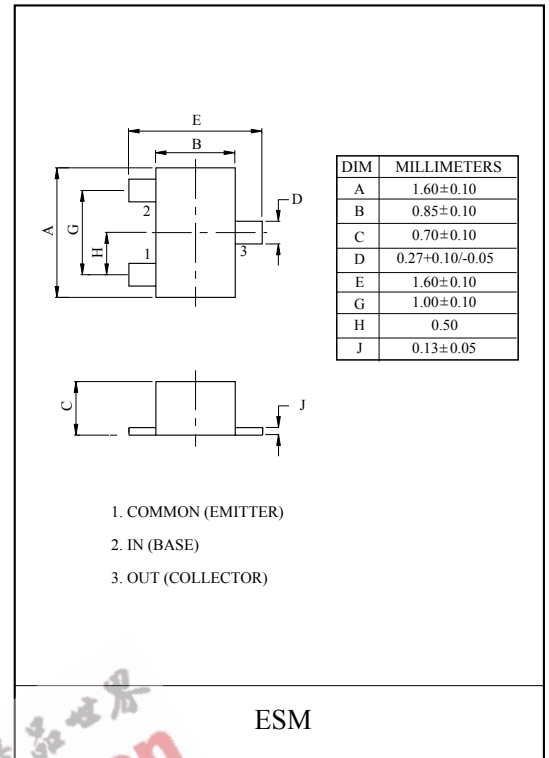
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

| TYPE NO. | R1(kΩ) | R2(kΩ) |
|----------|--------|--------|
| KRC401E | 4.7 | 4.7 |
| KRC402E | 10 | 10 |
| KRC403E | 22 | 22 |
| KRC404E | 47 | 47 |
| KRC405E | 2.2 | 47 |
| KRC406E | 4.7 | 47 |



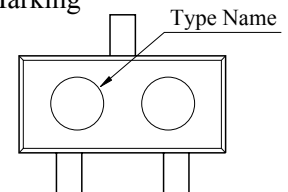
MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------|-----------|-----------|------|
| Output Voltage | V_o | 50 | V |
| Input Voltage | V_i | 20, -10 | V |
| | | 30, -10 | |
| | | 40, -10 | |
| | | 40, -10 | |
| | | 12, -5 | |
| | | 20, -5 | |
| Output Current | I_o | 100 | mA |
| Power Dissipation | P_D | 100 | mW |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -55 ~ 150 | °C |

MARK SPEC

| TYPE | KRC401E | KRC402E | KRC403E | KRC404E | KRC405E | KRC406E |
|------|---------|---------|---------|---------|---------|---------|
| MARK | NA | NB | NC | ND | NE | NF |

Marking



KRC401E~KRC406E

ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|------------------------|----------------|--------------|-----------------------|------|------|------|------|
| Output Cut-off Current | KRC401E ~ 406E | $I_{O(OFF)}$ | $V_O=50V, V_I=0$ | - | - | 500 | nA |
| DC Current Gain | KRC401E | G_I | $V_O=5V, I_O=10mA$ | 30 | 55 | - | |
| | KRC402E | | | 50 | 80 | - | |
| | KRC403E | | | 70 | 120 | - | |
| | KRC404E | | | 80 | 200 | - | |
| | KRC405E | | | 80 | 200 | - | |
| | KRC406E | | | 80 | 200 | - | |
| Output Voltage | KRC401E ~ 406E | $V_{O(ON)}$ | $I_O=10mA, I_I=0.5mA$ | - | 0.1 | 0.3 | V |
| Input Voltage (ON) | KRC401E | $V_{I(ON)}$ | $V_O=0.2V, I_O=5mA$ | - | 1.5 | 2.0 | V |
| | KRC402E | | | - | 1.8 | 2.4 | |
| | KRC403E | | | - | 2.1 | 3.0 | |
| | KRC404E | | | - | 2.8 | 5.0 | |
| | KRC405E | | | - | 0.8 | 1.1 | |
| | KRC406E | | | - | 0.9 | 1.3 | |
| Input Voltage (OFF) | KRC401E ~ 404E | $V_{I(OFF)}$ | $V_O=5V, I_O=0.1mA$ | 1.0 | 1.2 | - | V |
| | KRC405E ~ 406E | | | 0.5 | 0.65 | - | |
| Transition Frequency | KRC401E ~ 406E | f_T^* | $V_O=10V, I_O=5mA$ | - | 200 | - | MHz |
| Input Current | KRC401E | I_I | $V_I=5V$ | - | - | 1.8 | mA |
| | KRC402E | | | - | - | 0.88 | |
| | KRC403E | | | - | - | 0.36 | |
| | KRC404E | | | - | - | 0.18 | |
| | KRC405E | | | - | - | 3.6 | |
| | KRC406E | | | - | - | 1.8 | |

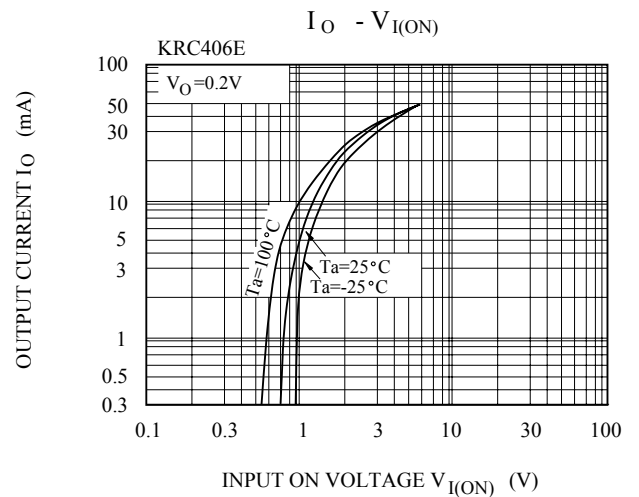
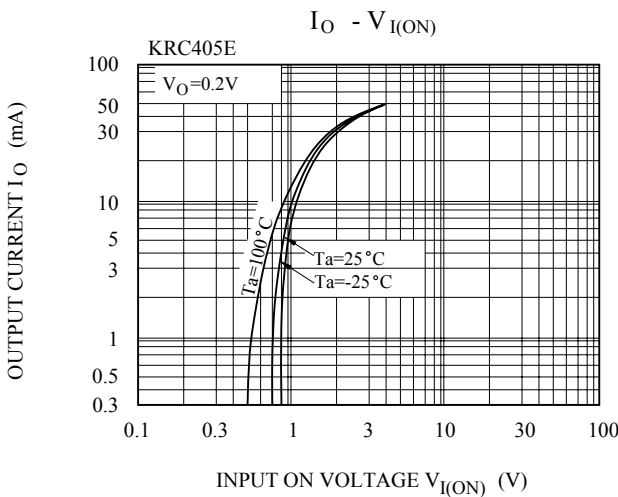
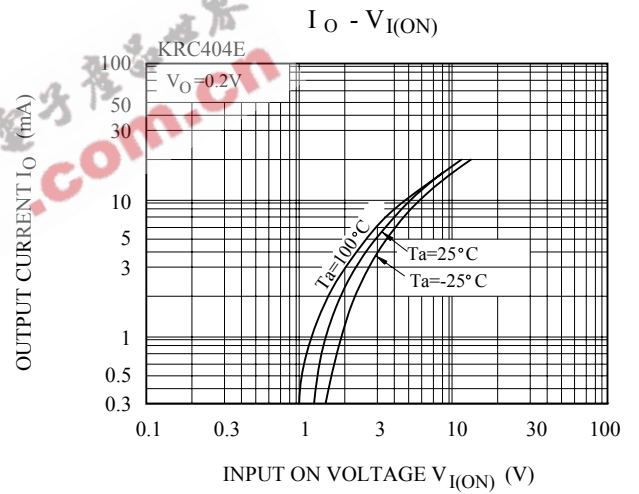
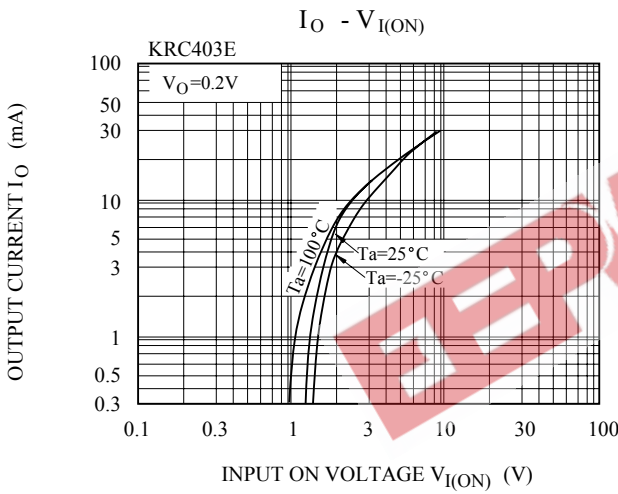
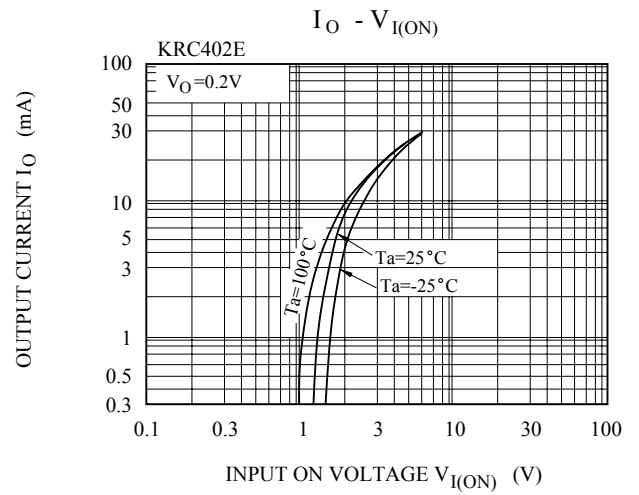
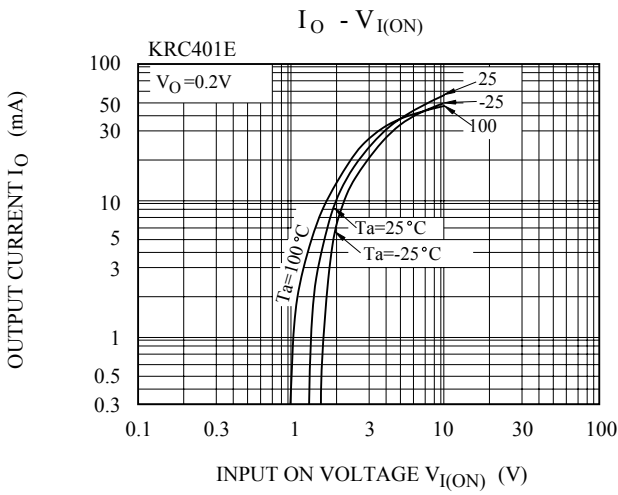
Note : * Characteristic of Transistor Only.

KRC401E~KRC406E

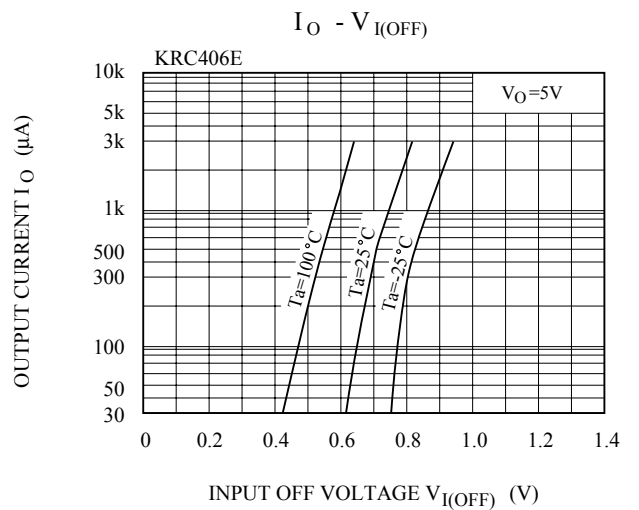
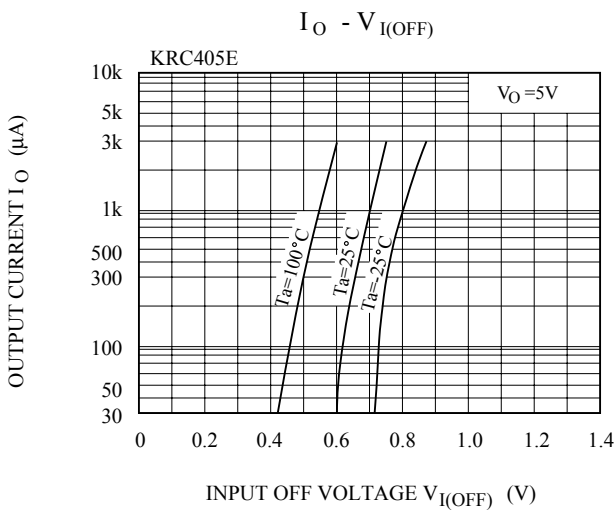
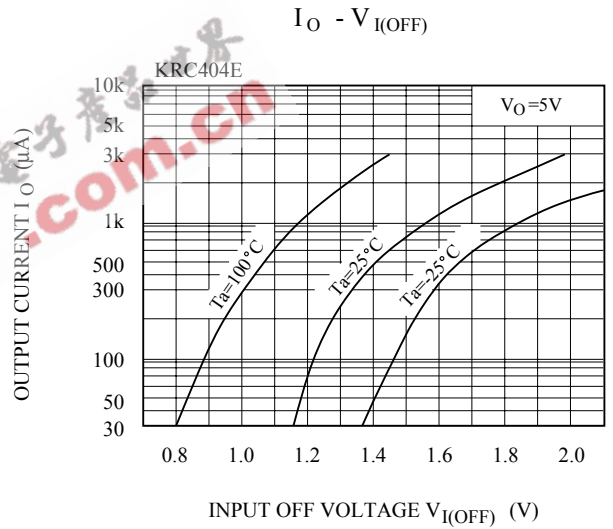
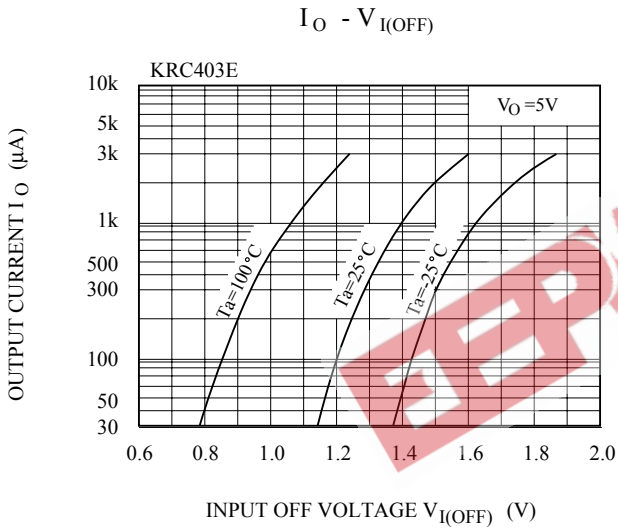
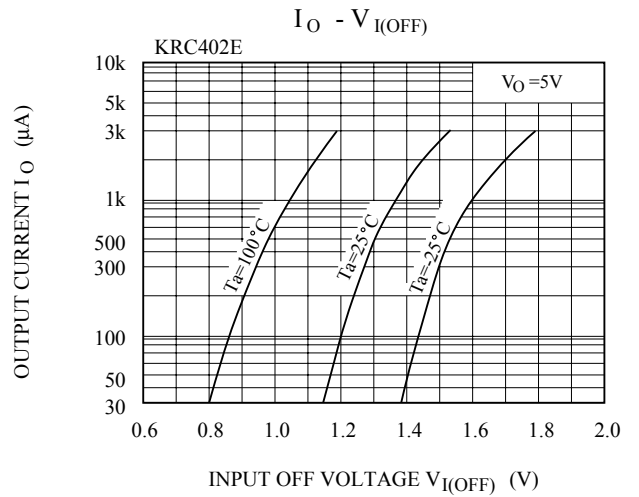
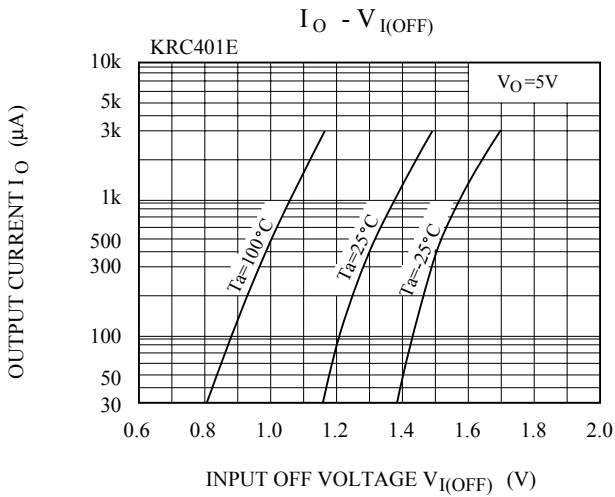
ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|----------------|--------------|---------|--|------|------|------|------|
| Switching Time | Rise Time | KRC401E | V _O =5V V _{IN} =5V R _L =1kΩ | - | 0.03 | - | μS |
| | | KRC402E | | - | 0.05 | - | |
| | | KRC403E | | - | 0.12 | - | |
| | | KRC404E | | - | 0.22 | - | |
| | | KRC405E | | - | 0.01 | - | |
| | | KRC406E | | - | 0.03 | - | |
| | Storage Time | KRC401E | | - | 2.0 | - | |
| | | KRC402E | | - | 2.0 | - | |
| | | KRC403E | | - | 2.0 | - | |
| | | KRC404E | | - | 2.0 | - | |
| | | KRC405E | | - | 2.0 | - | |
| | | KRC406E | | - | 2.0 | - | |
| | Fall Time | KRC401E | | - | 0.12 | - | |
| | | KRC402E | | - | 0.36 | - | |
| | | KRC403E | | - | 0.35 | - | |
| | | KRC404E | | - | 0.6 | - | |
| | | KRC405E | | - | 0.1 | - | |
| | | KRC406E | | - | 0.19 | - | |

KRC401E~KRC406E



KRC401E~KRC406E



KRC401E~KRC406E

