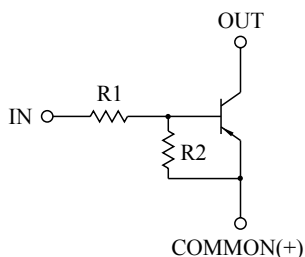


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

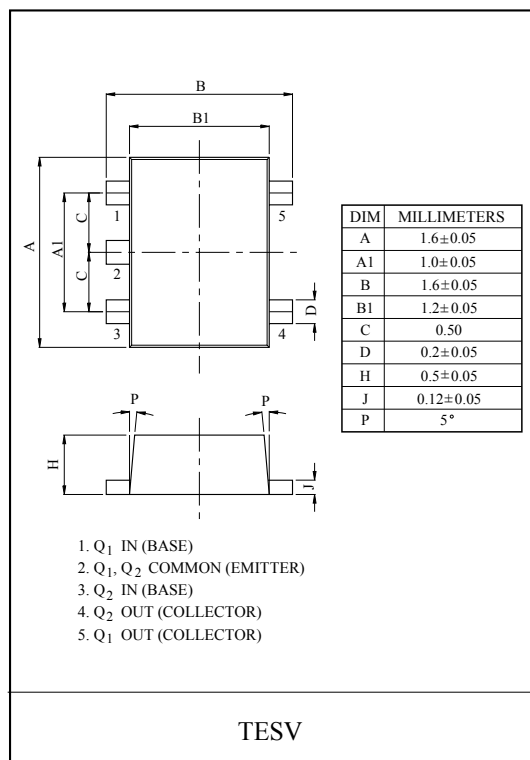
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

EQUIVALENT CIRCUIT

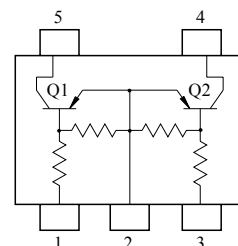


BIAS RESISTOR VALUES

| TYPE NO. | R1(k Ω) | R2(k Ω) |
|----------|-----------------|-----------------|
| KRA551E | 4.7 | 4.7 |
| KRA552E | 10 | 10 |
| KRA553E | 22 | 22 |
| KRA554E | 47 | 47 |
| KRA555E | 2.2 | 47 |
| KRA556E | 4.7 | 47 |



EQUIVALENT CIRCUIT (TOP VIEW)



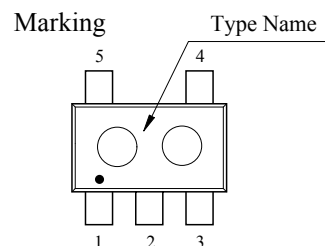
MAXIMUM RATING (Ta=25℃)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|---------------------------|--------------|------------------|-----------|------|
| Output Voltage | KRA551E~556E | V _O | -50 | V |
| Input Voltage | KRA551E | V _I | -20, 10 | V |
| | KRA552E | | -30, 10 | |
| | KRA553E | | -40, 10 | |
| | KRA554E | | -40, 10 | |
| | KRA555E | | -12, 5 | |
| | KRA556E | | -20, 5 | |
| Output Current | KRA551E~556E | I _O | -100 | mA |
| Power Dissipation | | P _D * | 200 | mW |
| Junction Temperature | | T _j | 150 | ℃ |
| Storage Temperature Range | | T _{stg} | -55 ~ 150 | ℃ |

* Total Rating.

MARK SPEC

| TYPE | KRA551E | KRA552E | KRA553E | KRA554E | KRA555E | KRA556E |
|------|---------|---------|---------|---------|---------|---------|
| MARK | PA | PB | PC | PD | PE | PF |



KRA551E~KRA556E

ELECTRICAL CHARACTERISTICS (Ta=25℃)

| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|------------------------|----------------|--------------|-----------------------------|------|-------|-------|------|
| Output Cut-off Current | KRA551E ~ 556E | $I_{O(OFF)}$ | $V_O = -50V, V_I = 0$ | - | - | -500 | nA |
| DC Current Gain | KRA551E | G_I | $V_O = -5V, I_O = -10mA$ | 30 | 55 | - | |
| | KRA552E | | | 50 | 80 | - | |
| | KRA553E | | | 70 | 120 | - | |
| | KRA554E | | | 80 | 200 | - | |
| | KRA555E | | | 80 | 200 | - | |
| | KRA556E | | | 80 | 200 | - | |
| Output Voltage | KRA551E ~ 556E | $V_{O(ON)}$ | $I_O = -10mA, I_I = -0.5mA$ | - | -0.1 | -0.3 | V |
| Input Voltage (ON) | KRA551E | $V_{I(ON)}$ | $V_O = -0.2V, I_O = -5mA$ | - | -1.5 | -2.0 | V |
| | KRA552E | | | - | -1.8 | -2.4 | |
| | KRA553E | | | - | -2.1 | -3.0 | |
| | KRA554E | | | - | -2.8 | -5.0 | |
| | KRA555E | | | - | -0.8 | -1.1 | |
| | KRA556E | | | - | -0.9 | -1.3 | |
| Input Voltage (OFF) | KRA551E ~ 554E | $V_{I(OFF)}$ | $V_O = -5V, I_O = -0.1mA$ | -1.0 | -1.2 | - | V |
| | KRA555E ~ 556E | | | -0.5 | -0.65 | - | |
| Transition Frequency | KRA551E ~ 556E | f_T^* | $V_O = -10V, I_O = -5mA$ | - | 200 | - | MHz |
| Input Current | KRA551E | I_I | $V_I = -5V$ | - | - | -1.8 | mA |
| | KRA552E | | | - | - | -0.88 | |
| | KRA553E | | | - | - | -0.36 | |
| | KRA554E | | | - | - | -0.18 | |
| | KRA555E | | | - | - | -3.6 | |
| | KRA556E | | | - | - | -1.8 | |

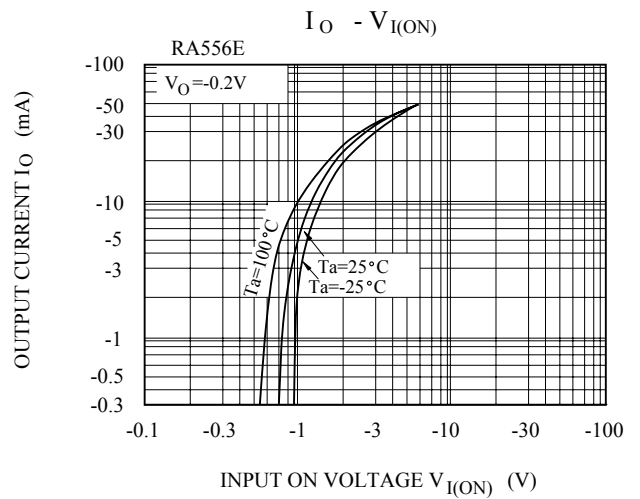
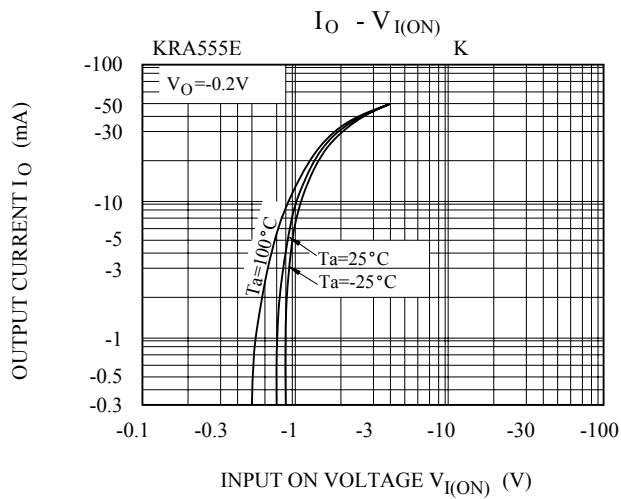
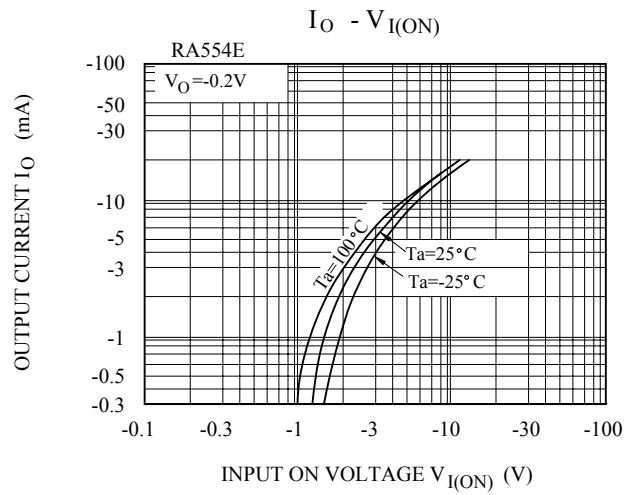
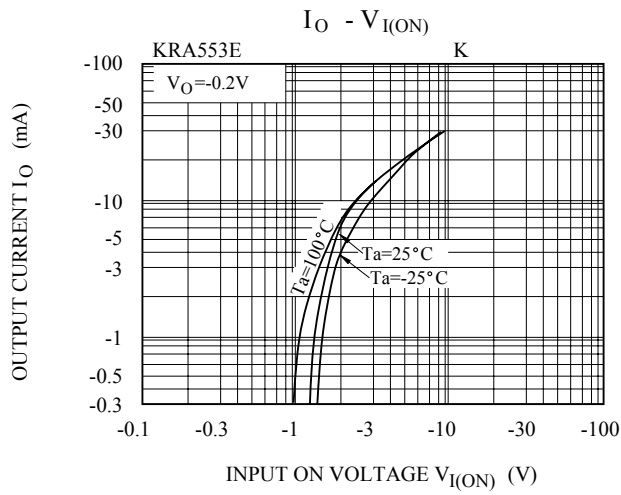
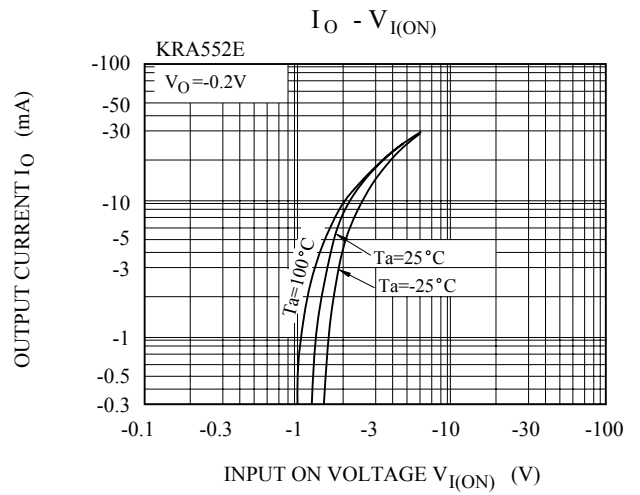
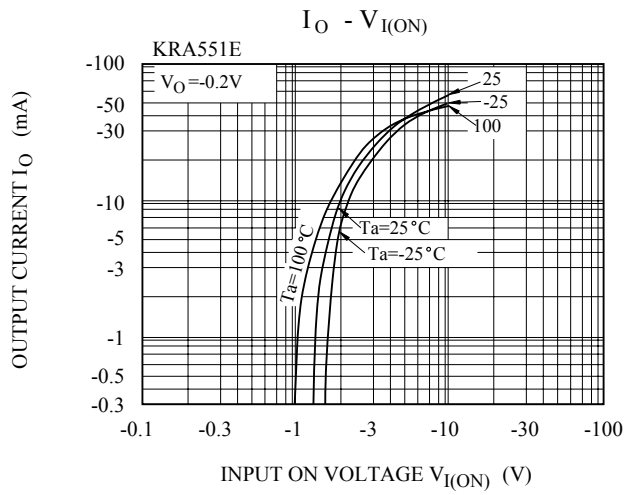
Note : * Characteristic of Transistor Only.

KRA551E~KRA556E

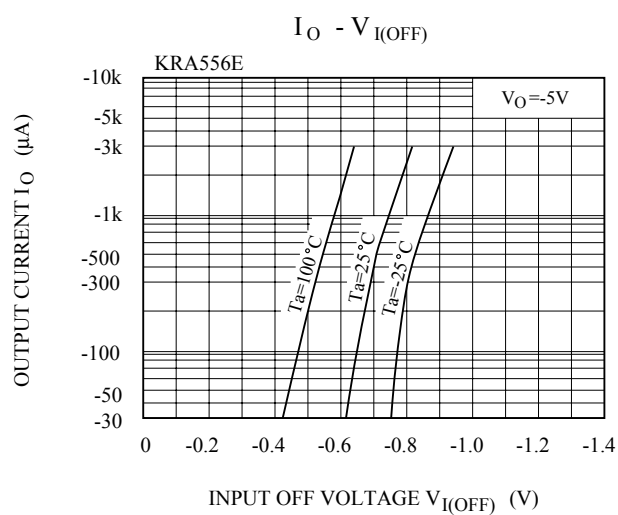
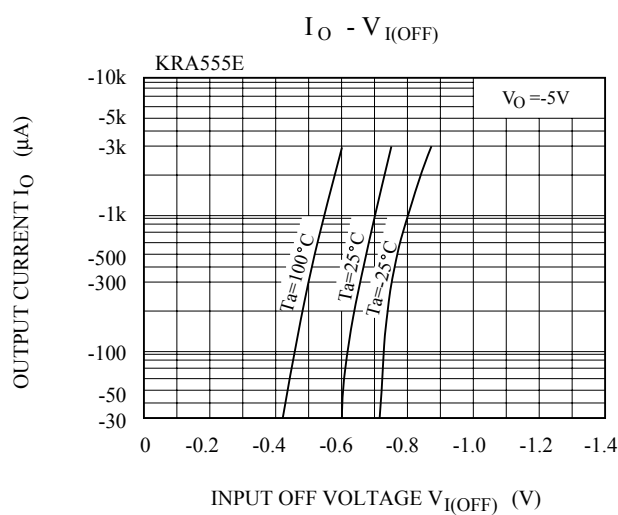
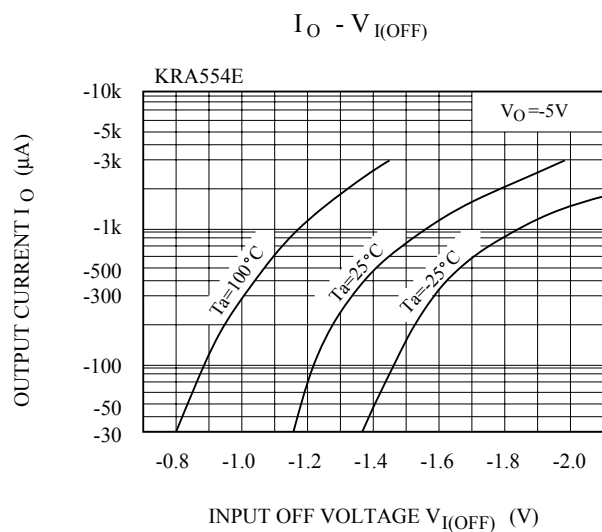
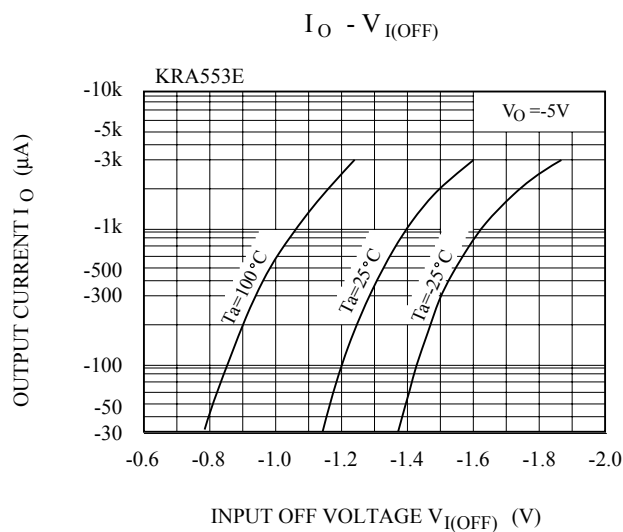
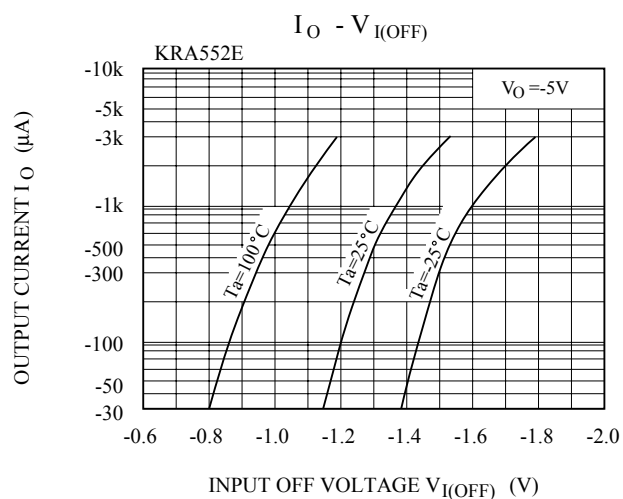
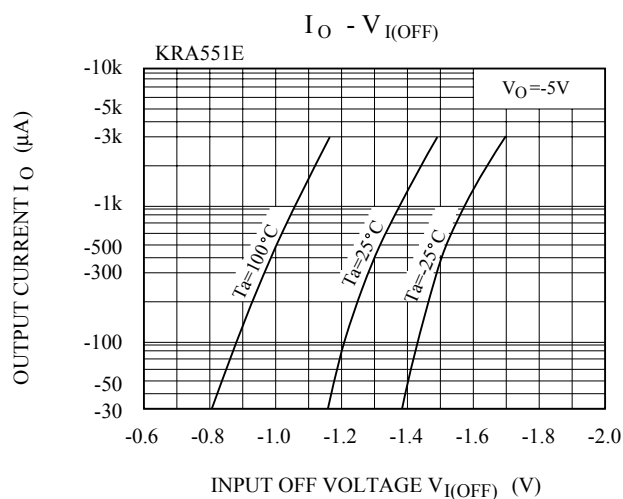
ELECTRICAL CHARACTERISTICS (Ta=25℃)

| CHARACTERISTIC | | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|----------------|--------------|---------|------------------|--|------|------|------|------|
| Switching Time | Rise Time | KRA551E | t _r | V _O =-5V V _{IN} =-5V R _L =1kΩ | - | 0.07 | - | μS |
| | | KRA552E | | | - | 0.06 | - | |
| | | KRA553E | | | - | 0.2 | - | |
| | | KRA554E | | | - | 0.24 | - | |
| | | KRA555E | | | - | 0.02 | - | |
| | | KRA556E | | | - | 0.07 | - | |
| | Storage Time | KRA551E | t _{stg} | | - | 1.1 | - | |
| | | KRA552E | | | - | 1.1 | - | |
| | | KRA553E | | | - | 1.1 | - | |
| | | KRA554E | | | - | 1.1 | - | |
| | | KRA555E | | | - | 1.1 | - | |
| | | KRA556E | | | - | 1.1 | - | |
| | Fall Time | KRA551E | t _f | | - | 0.15 | - | |
| | | KRA552E | | | - | 0.24 | - | |
| | | KRA553E | | | - | 0.38 | - | |
| | | KRA554E | | | - | 0.63 | - | |
| | | KRA555E | | | - | 0.1 | - | |
| | | KRA556E | | | - | 0.2 | - | |

KRA551E~KRA556E



KRA551E~KRA556E



KRA551E~KRA556E

