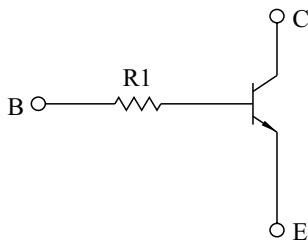


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

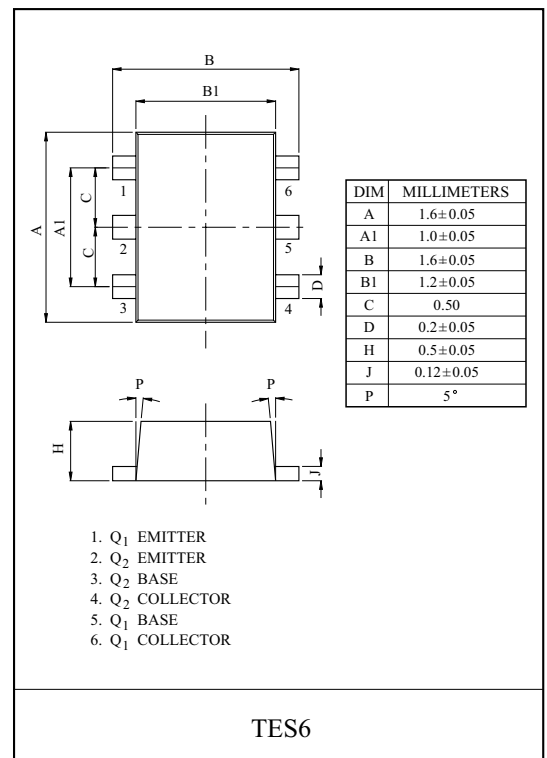
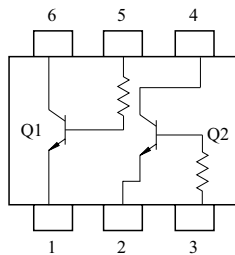
### FEATURES

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

### EQUIVALENT CIRCUIT



### EQUIVALENT CIRCUIT (TOP VIEW)



### MAXIMUM RATING (Ta=25℃)

| CHARACTERISTIC            | SYMBOL           | RATING | UNIT |
|---------------------------|------------------|--------|------|
| Collector-Base Voltage    | V <sub>CBO</sub> | 50     | V    |
| Collector-Emitter Voltage | V <sub>CEO</sub> | 50     | V    |
| Emitter-Base Voltage      | V <sub>EBO</sub> | 5      | V    |
| Collector Current         | I <sub>C</sub>   | 100    | mA   |

| CHARACTERISTIC              | SYMBOL           | RATING    | UNIT |
|-----------------------------|------------------|-----------|------|
| Collector Power Dissipation | P <sub>C</sub> * | 200       | mW   |
| Junction Temperature        | T <sub>j</sub>   | 150       | ℃    |
| Storage Temperature Range   | T <sub>stg</sub> | -55 ~ 150 | ℃    |

\* Total Raing.

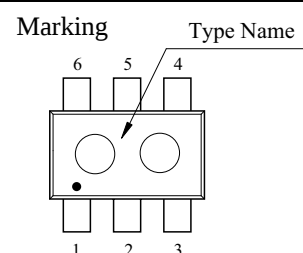
### ELECTRICAL CHARACTERISTICS (Ta=25℃)

| CHARACTERISTIC                       | SYMBOL               | TEST CONDITION                              | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|----------------------|---------------------------------------------|------|------|------|------|
| Collector Cut-off Current            | I <sub>CBO</sub>     | V <sub>CB</sub> =50V, I <sub>E</sub> =0     | -    | -    | 100  | nA   |
| Emitter Cut-off Current              | I <sub>EBO</sub>     | V <sub>EB</sub> =5V, I <sub>C</sub> =0      | -    | -    | 100  | nA   |
| DC Current Gain                      | h <sub>FE</sub>      | V <sub>CE</sub> =5V, I <sub>C</sub> =1mA    | 120  | -    | -    |      |
| Collector-Emitter Saturation Voltage | V <sub>CE(sat)</sub> | I <sub>C</sub> =10mA, I <sub>B</sub> =0.5mA | -    | 0.1  | 0.3  | V    |
| Transition Frequency                 | f <sub>T</sub> *     | V <sub>CE</sub> =10V, I <sub>C</sub> =5mA   | -    | 250  | -    | MHz  |
| Input Resistor                       | KRC830E              | R <sub>1</sub>                              | -    | 4.7  | -    | kΩ   |
|                                      | KRC831E              |                                             | -    | 10   | -    |      |
|                                      | KRC832E              |                                             | -    | 100  | -    |      |
|                                      | KRC833E              |                                             | -    | 22   | -    |      |
|                                      | KRC834E              |                                             | -    | 47   | -    |      |

Note : \* Characteristic of Transistor Only.

### MARK SPEC

| TYPE | KRC830E | KRC831E | KRC832E | KRC833E | KRC834E |
|------|---------|---------|---------|---------|---------|
| MARK | YK      | YM      | YN      | YO      | YP      |

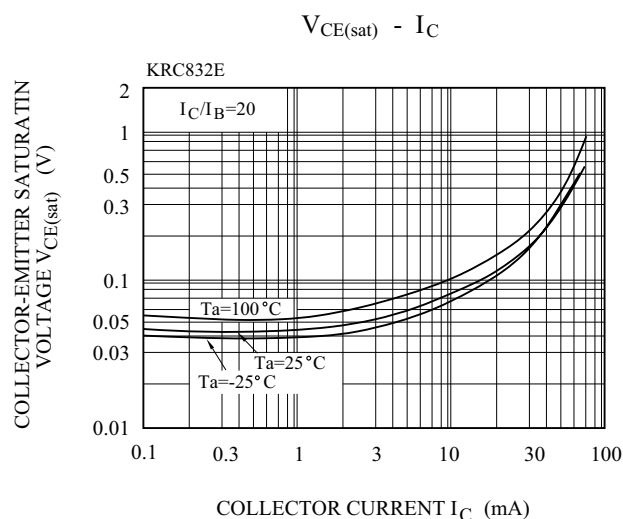
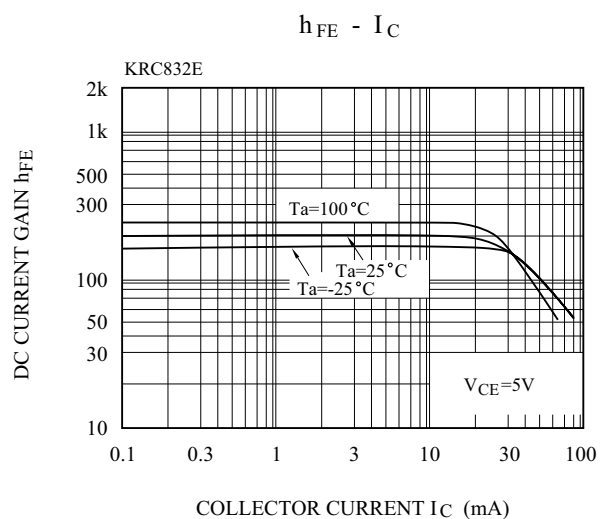
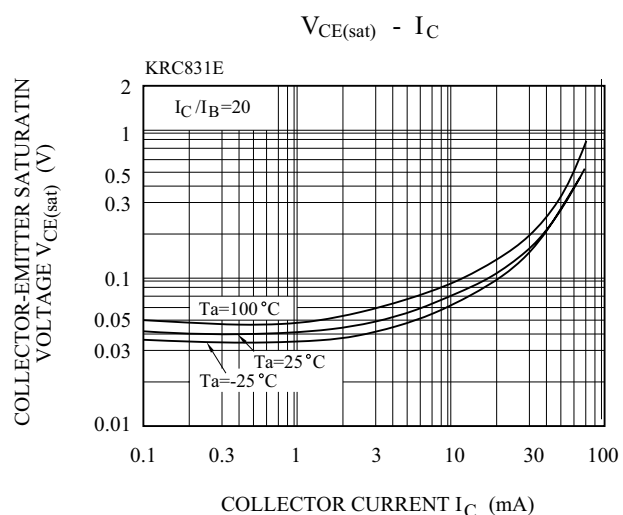
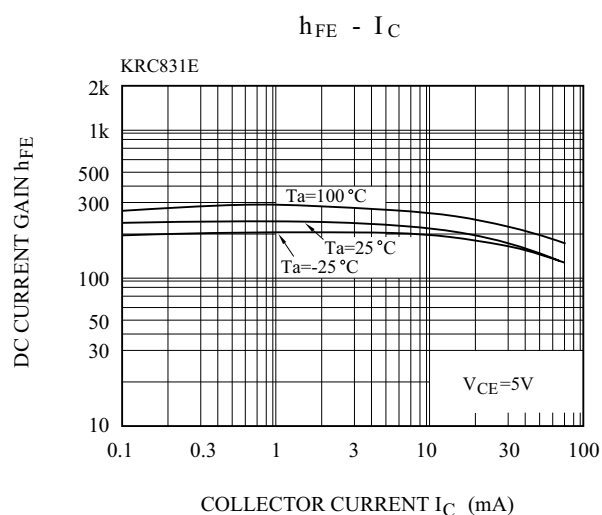
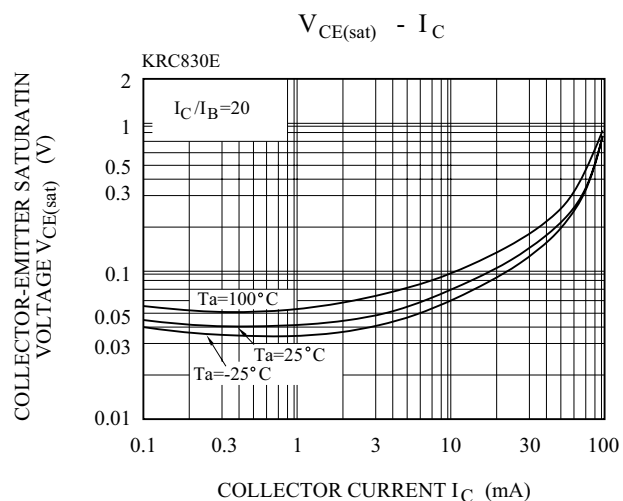
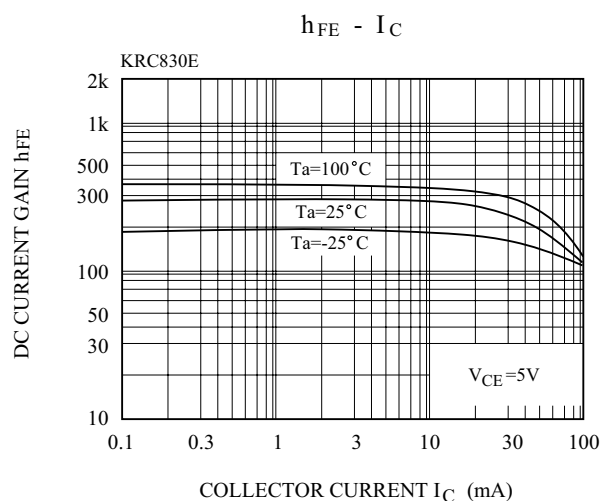


# KRC830E~KRC834E

## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC |              |         | SYMBOL    | TEST CONDITION                              | MIN. | TYP.  | MAX. | UNIT    |
|----------------|--------------|---------|-----------|---------------------------------------------|------|-------|------|---------|
| Switching Time | Rise Time    | KRC830E | $t_r$     | $V_O=5V$<br>$V_{IN}=5V$<br>$R_L=1k\ \Omega$ | -    | 0.025 | -    | $\mu S$ |
|                |              | KRC831E |           |                                             | -    | 0.03  | -    |         |
|                |              | KRC832E |           |                                             | -    | 0.3   | -    |         |
|                |              | KRC833E |           |                                             | -    | 0.06  | -    |         |
|                |              | KRC834E |           |                                             | -    | 0.11  | -    |         |
|                | Storage Time | KRC830E | $t_{stg}$ |                                             | -    | 3.0   | -    |         |
|                |              | KRC831E |           |                                             | -    | 2.0   | -    |         |
|                |              | KRC832E |           |                                             | -    | 6.0   | -    |         |
|                |              | KRC833E |           |                                             | -    | 4.0   | -    |         |
|                |              | KRC834E |           |                                             | -    | 5.0   | -    |         |
|                | Fall Time    | KRC830E | $t_f$     |                                             | -    | 0.2   | -    |         |
|                |              | KRC831E |           |                                             | -    | 0.12  | -    |         |
|                |              | KRC832E |           |                                             | -    | 2.0   | -    |         |
|                |              | KRC833E |           |                                             | -    | 0.9   | -    |         |
|                |              | KRC834E |           |                                             | -    | 1.4   | -    |         |

# KRC830E~KRC834E



# KRC830E~KRC834E

