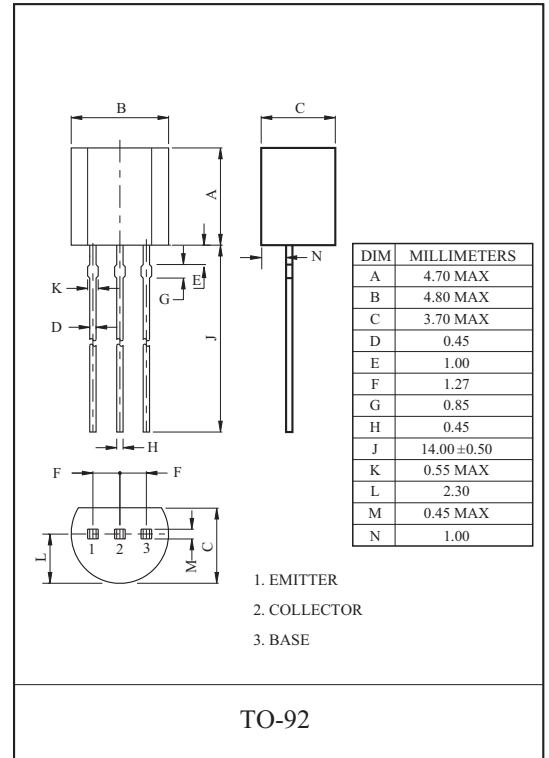
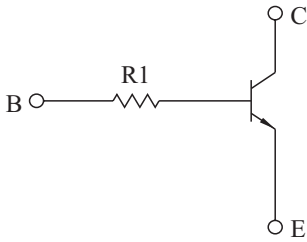


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

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

EQUIVALENT CIRCUIT



MAXIMUM RATING (Ta=25)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|---------|------|
| Collector-Base Voltage | V_{CBO} | 50 | V |
| Collector-Emitter Voltage | V_{CEO} | 50 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 100 | mA |
| Collector Power Dissipation | P_C | 625 | mW |
| Junction Temperature | T_j | 150 | |
| Storage Temperature Range | T_{stg} | -55 150 | |

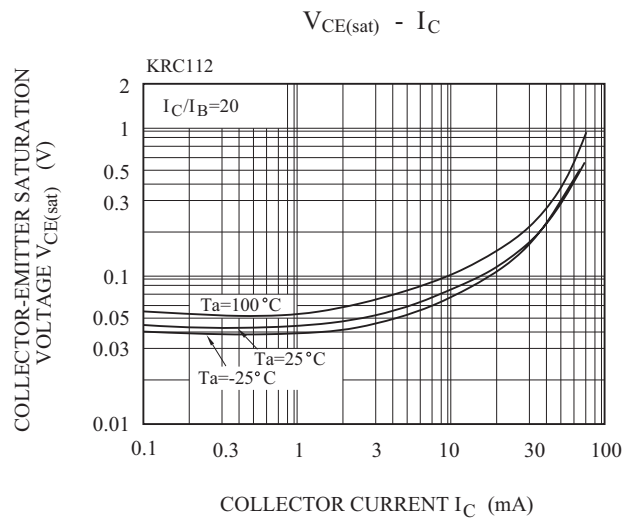
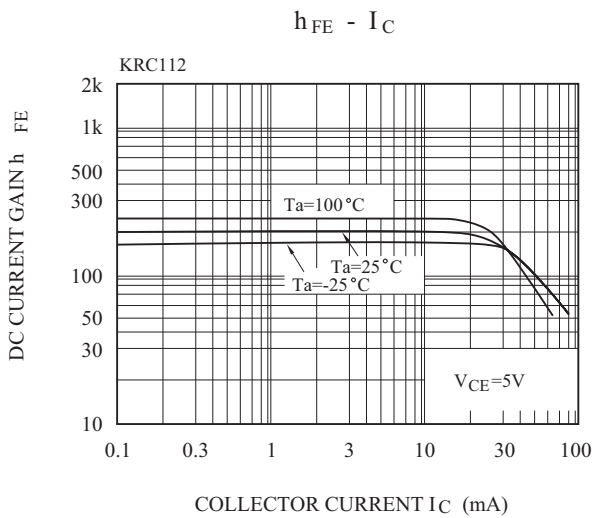
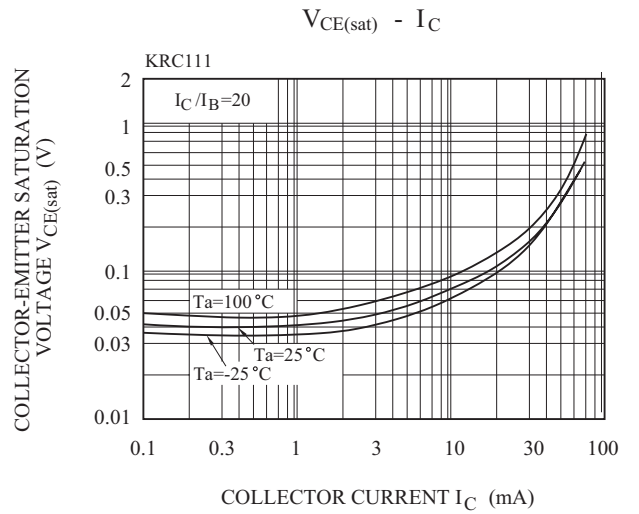
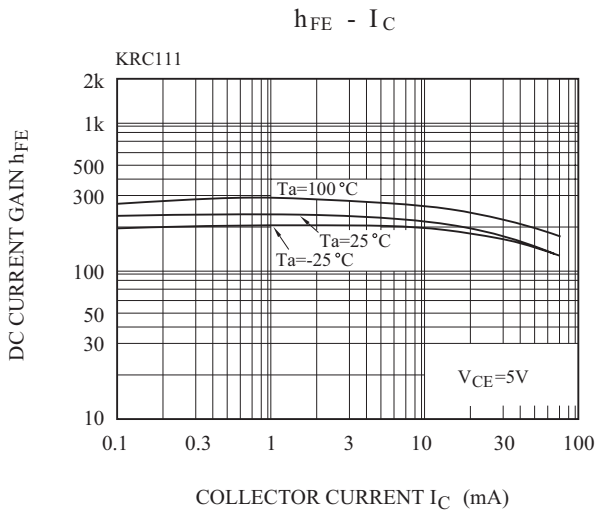
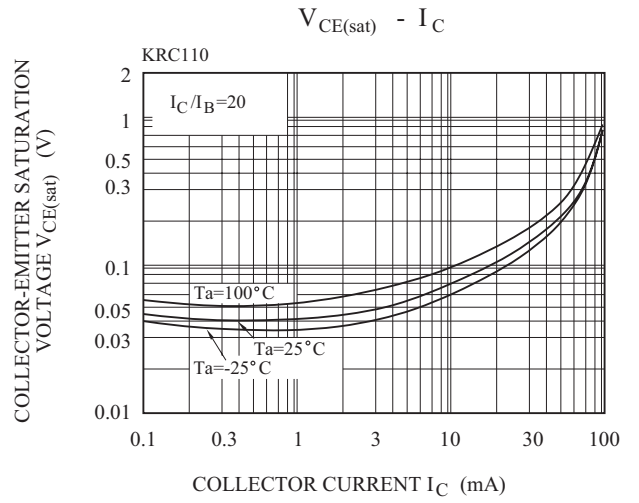
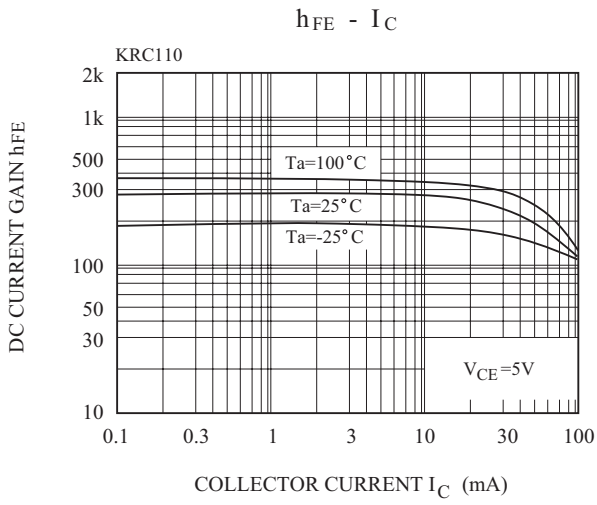
KRC110~KRC114

ELECTRICAL CHARACTERISTICS (Ta=25)

| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT | | |
|--------------------------------------|--------------|---------------|-----------------------|-------------------------------------|-----------|-------|------|---------|---|
| Collector Cut-off Current | | I_{CBO} | $V_{CB}=50V, I_E=0$ | - | - | 100 | nA | | |
| Emitter Cut-off Current | | I_{EBO} | $V_{EB}=5V, I_C=0$ | - | - | 100 | nA | | |
| DC Current Gain | | h_{FE} | $V_{CE}=5V, I_C=1mA$ | 120 | - | - | | | |
| Collector-Emitter Saturation Voltage | | $V_{CE(sat)}$ | $I_C=10mA, I_B=0.5mA$ | - | 0.1 | 0.3 | V | | |
| Transition Frequency | | f_T^* | $V_{CE}=10V, I_C=5mA$ | - | 250 | - | MHz | | |
| Switching Time | Rise Time | KRC110 | t_r | $V_O=5V$ $V_{IN}=5V$ $R_L=1k$ | - | 0.025 | - | μs | |
| | | KRC111 | | | - | 0.03 | - | | |
| | | KRC112 | | | - | 0.3 | - | | |
| | | KRC113 | | | - | 0.06 | - | | |
| | | KRC114 | | | - | 0.11 | - | | |
| | Storage Time | KRC110 | | | t_{stg} | - | 3.0 | | - |
| | | KRC111 | | | - | - | 2.0 | | - |
| | | KRC112 | | | - | - | 6.0 | | - |
| | | KRC113 | | | - | - | 4.0 | | - |
| | | KRC114 | | | - | - | 5.0 | | - |
| | Fall Time | KRC110 | | | t_f | - | 0.2 | | - |
| | | KRC111 | | | - | - | 0.12 | | - |
| | | KRC112 | | | - | - | 2.0 | | - |
| | | KRC113 | | | - | - | 0.9 | | - |
| | | KRC114 | | | - | - | 1.4 | | - |
| Input Resistor | | KRC110 | R_1 | - | 3.29 | 4.7 | 6.11 | k | |
| | | KRC111 | | | 7 | 10 | 13 | | |
| | | KRC112 | | | 70 | 100 | 130 | | |
| | | KRC113 | | | 15.4 | 22 | 28.6 | | |
| | | KRC114 | | | 32.9 | 47 | 61.1 | | |

Note : * Characteristic of Transistor Only.

KRC110~KRC114



KRC110~KRC114

