

## Descriptions

- Switching application
- Interface circuit and driver circuit application

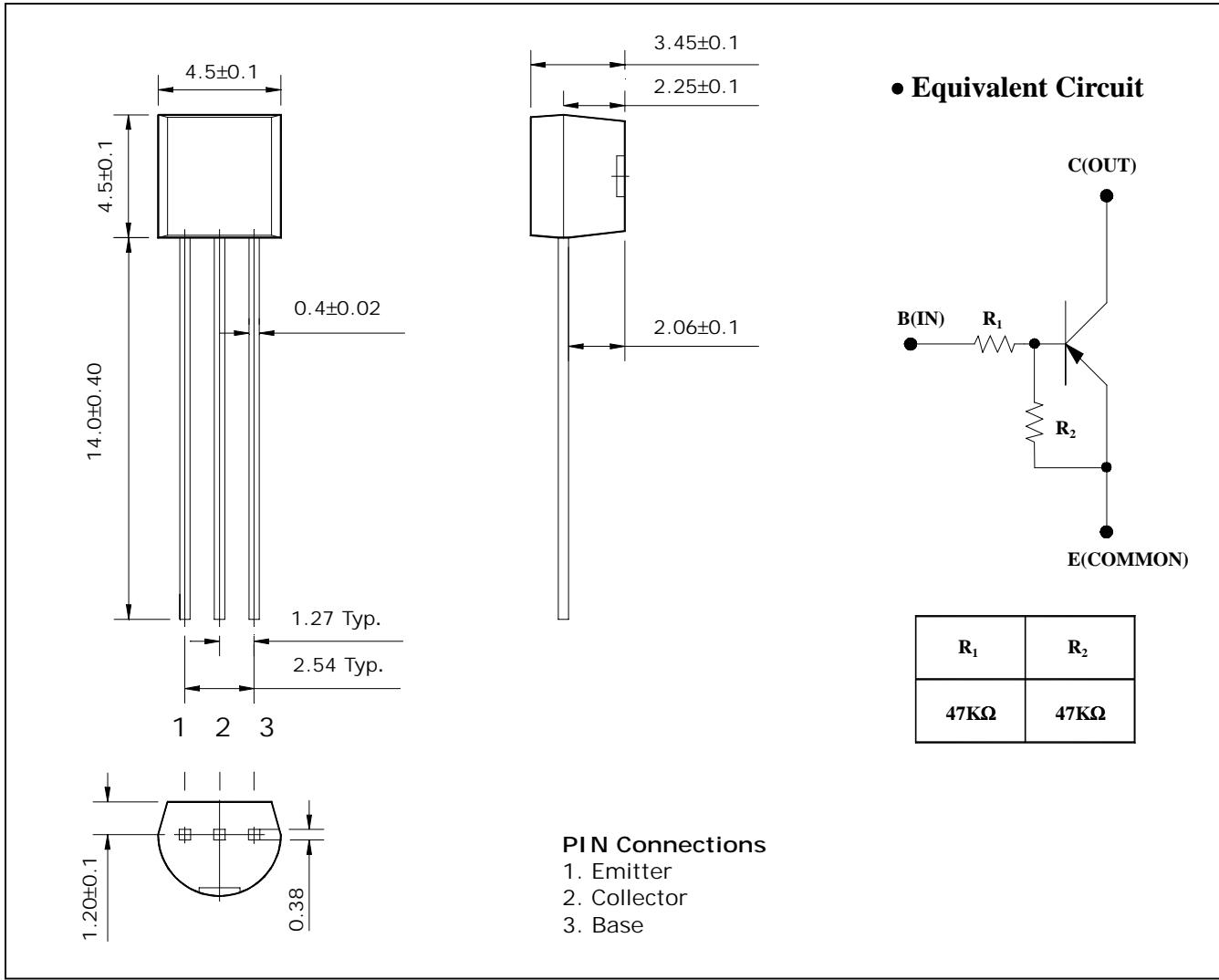
## Features

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- High packing density

## Ordering Information

| Type NO. | Marking | Package Code |
|----------|---------|--------------|
| SRA2204  | SRA2204 | TO-92        |

## Outline Dimensions



**Absolute maximum ratings**

(Ta=25°C)

| <b>Characteristic</b> | <b>Symbol</b>    | <b>Ratings</b> | <b>Unit</b> |
|-----------------------|------------------|----------------|-------------|
| Out Voltage           | V <sub>O</sub>   | -50            | V           |
| Input Voltage         | V <sub>I</sub>   | -40            | V           |
| Out Current           | I <sub>O</sub>   | -100           | mA          |
| Power Dissipation     | P <sub>D</sub>   | 625            | mW          |
| Junction Temperature  | T <sub>J</sub>   | 150            | °C          |
| Storage Temperature   | T <sub>STG</sub> | -55 ~ 150      | °C          |

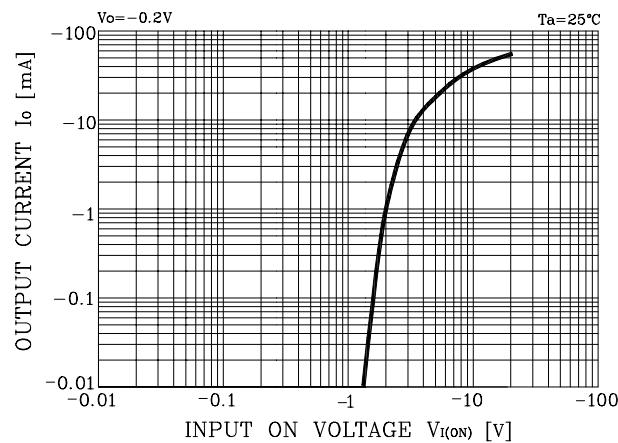
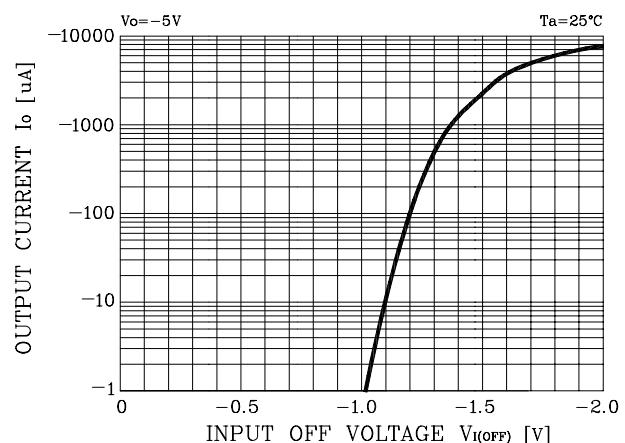
**Electrical Characteristics**

(Ta=25°C)

| <b>Characteristic</b>  | <b>Symbol</b>               | <b>Test Condition</b>                         | <b>Min.</b> | <b>Typ.</b> | <b>Max.</b> | <b>Unit</b> |
|------------------------|-----------------------------|---|-------------|-------------|-------------|-------------|
| Output Cut-off Current | I <sub>O(OFF)</sub>         | V <sub>O</sub> =-50V, V <sub>I</sub> =0       | -           | -           | -500        | nA          |
| DC Current Gain        | G <sub>I</sub>              | V <sub>O</sub> =-5V, I <sub>O</sub> =-10mA    | 80          | 200         | -           | -           |
| Output Voltage         | V <sub>O(ON)</sub>          | I <sub>O</sub> =-10mA, I <sub>I</sub> =-0.5mA | -           | -0.1        | -0.3        | V           |
| Input Voltage (ON)     | V <sub>I(ON)</sub>          | V <sub>O</sub> =-0.2V, I <sub>O</sub> =-5mA   | -           | -2.8        | -5.0        | V           |
| Input Voltage (OFF)    | V <sub>I(OFF)</sub>         | V <sub>O</sub> =-5V, I <sub>O</sub> =-0.1mA   | -1.0        | -1.2        | -           | V           |
| Transition Frequency   | f <sub>T</sub> <sup>*</sup> | V <sub>O</sub> =-10V, I <sub>O</sub> =-5mA    | -           | 200         | -           | MHz         |
| Input Current          | I <sub>I</sub>              | V <sub>I</sub> =-5V                           | -           | -           | -0.18       | mA          |

\* : Characteristic of Transistor Only

## Electrical Characteristic Curves

**Fig. 1**  $I_o$  -  $V_{I(ON)}$ **Fig. 2**  $I_o$  -  $V_{I(OFF)}$ **Fig. 3**  $G_I$  -  $I_o$ 