

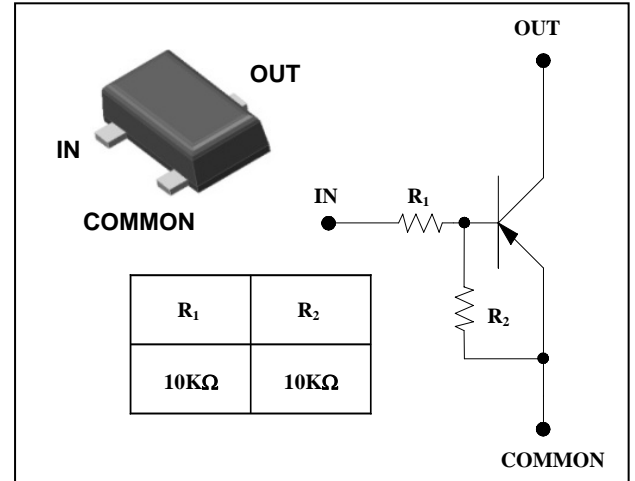
Descriptions

- 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

PIN Connection



Ordering Information

| Type NO. | Marking | Package Code |
|-----------|--|--------------|
| SRA2202SF | RA2  ① ② | SOT-23F |

① Device Code ② Year&Week Code

Absolute Maximum Ratings

(Ta=25°C)

| Characteristic | Symbol | Rating | Unit |
|---------------------------|------------------|-----------|------|
| Output voltage | V _O | -50 | V |
| Input voltage | V _I | -30, 10 | V |
| Output current | I _O | -100 | mA |
| Power dissipation | P _D | 200 | mW |
| Junction temperature | T _J | 150 | °C |
| Storage temperature range | T _{stg} | -55 ~ 150 | °C |

Electrical Characteristics

(Ta=25°C)

| Characteristic | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|---------------------------------|---------------------|--|------|------|-------|------|
| Output cut-off current | I _{O(OFF)} | V _O =-50V, V _I =0 | - | - | -500 | nA |
| DC current gain | G _I | V _O =-5V, I _O =-10mA | 50 | 80 | - | - |
| Output voltage | V _{O(ON)} | I _O =-10mA, I _I =-0.5mA | - | -0.1 | -0.3 | V |
| Input voltage (ON) | V _{I(ON)} | V _O =-0.2V, I _O =-5mA | - | -1.8 | -2.4 | V |
| Input voltage (OFF) | V _{I(OFF)} | V _O =-5V, I _O =-0.1mA | -1.0 | -1.2 | - | V |
| Transition frequency | f _T * | V _O =-10V, I _O =-5mA, f=1MHz | - | 200 | - | MHz |
| Input current | I _I | V _I =-5V, I _O =0 | - | - | -0.88 | mA |
| Input resistor (Input to base) | R ₁ | - | 7 | 10 | 13 | KΩ |
| Input resistor (Base to common) | R ₂ | - | 7 | 10 | 13 | KΩ |

* : Characteristic of transistor only

Electrical Characteristic Curves

Fig. 1 $P_c - T_a$

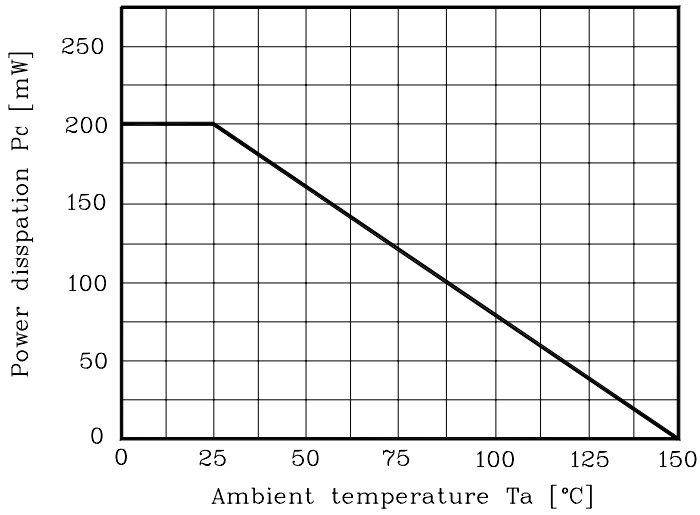


Fig. 2 $I_o - V_{I(ON)}$

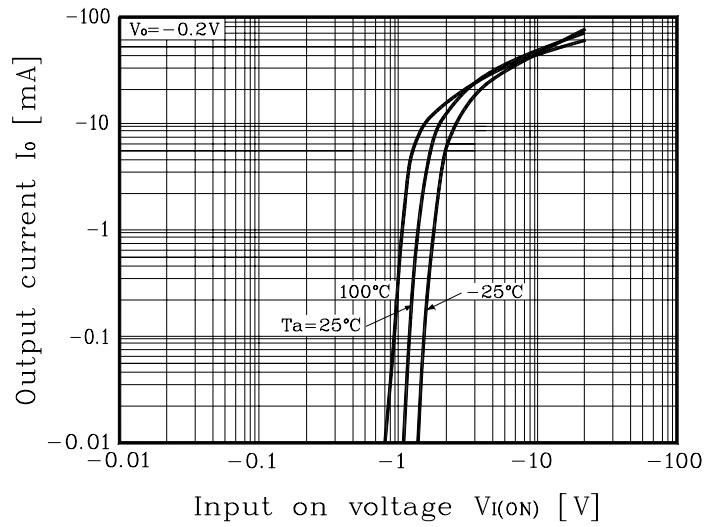


Fig. 3 $I_o - V_{I(OFF)}$

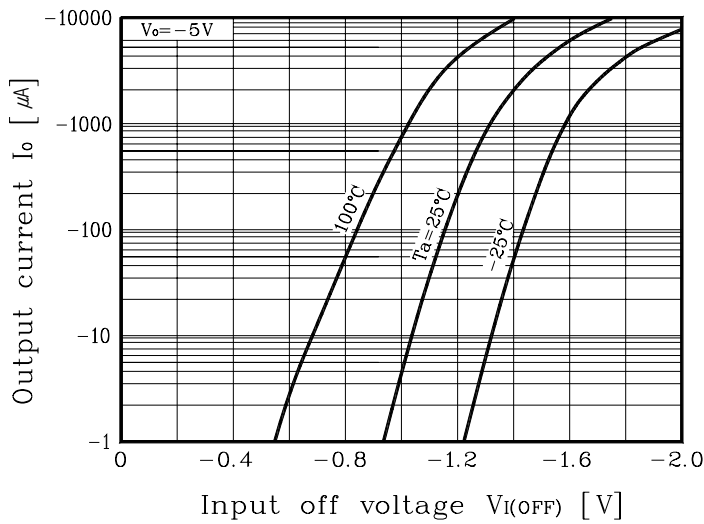
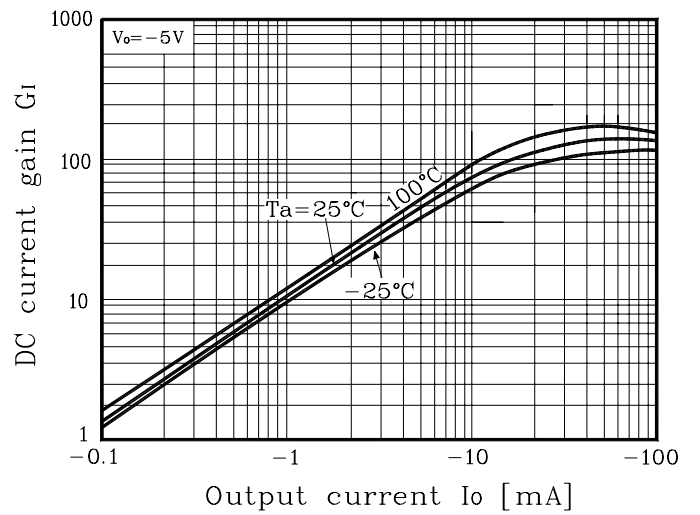
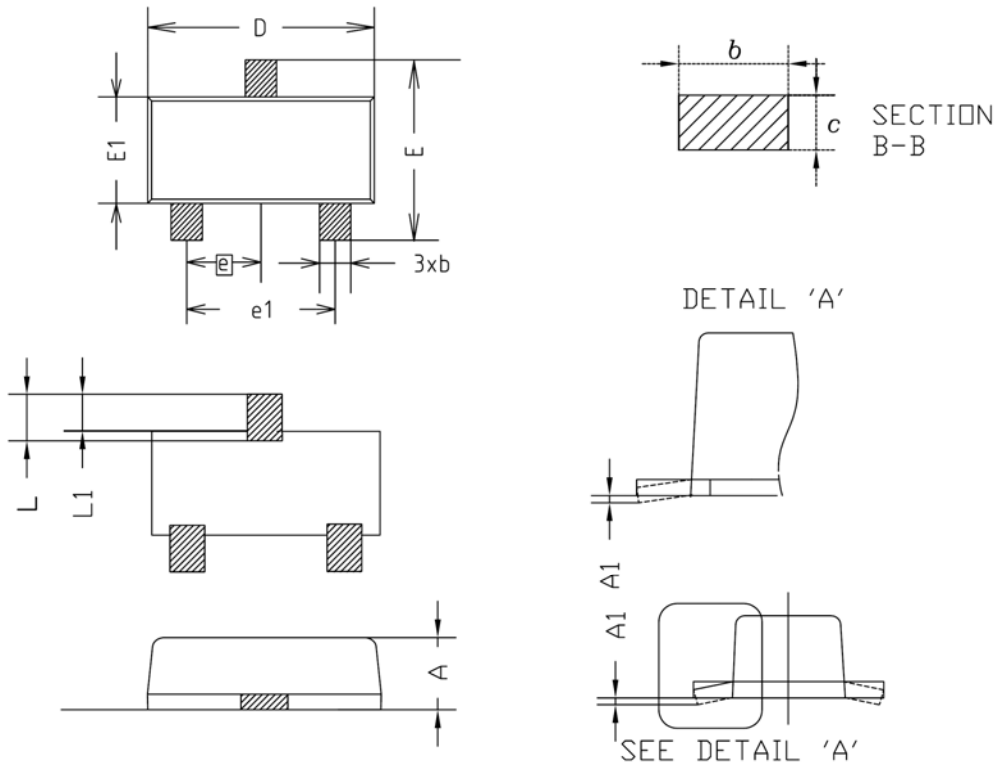


Fig. 4 $G_I - I_o$

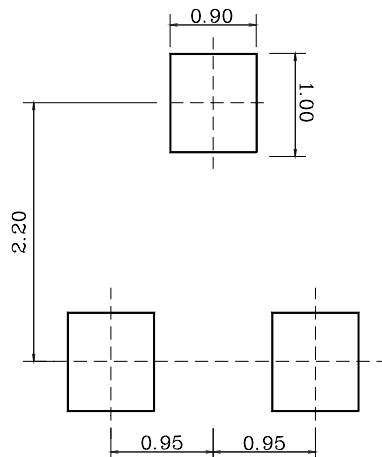


Outline Dimension



| SYMBOL | MILLIMETER(mm) | | | NOTE |
|--------|----------------|---------|---------|------|
| | MINIMUM | NOMINAL | MAXIMUM | |
| A | 0.80 | 0.90 | 1.00 | |
| A1 | 0.00 | - | 0.10 | |
| b | 0.35 | 0.40 | 0.45 | |
| c | 0.10 | 0.15 | 0.20 | |
| D | 2.80 | 2.90 | 3.00 | |
| E | 2.30 | 2.40 | 2.50 | |
| E1 | 1.50 | 1.60 | 1.70 | |
| e | 0.95BSC | | | |
| e1 | 1.80 | 1.90 | 2.00 | |
| L | 0.48 | 0.58 | 0.68 | |
| L1 | 0.30 | - | 0.50 | |

※Recommend PCB solder land [Unit: mm]



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