

## Descriptions

- Switching application
- Interface circuit and driver circuit application

## Features

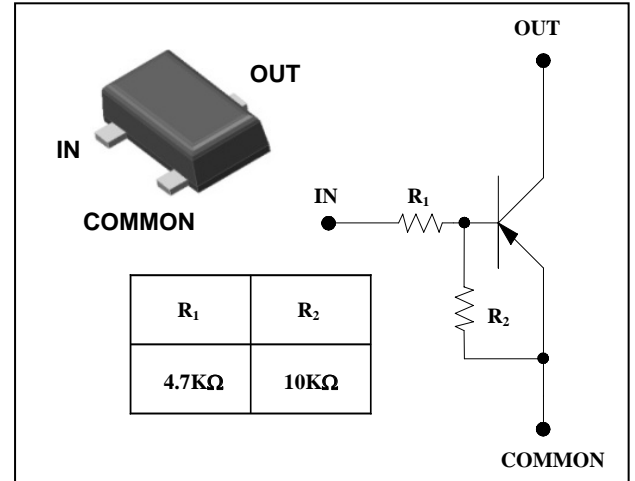
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- High packing density

## Ordering Information

Type NO.	Marking	Package Code
SRA2219SF	RAC  ① ②	SOT-23F

① Device Code ② Year & Week Code

## PIN Connection



## Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	V <sub>O</sub>	-50	V
Input voltage	V <sub>I</sub>	-20, 7	V
Output current	I <sub>O</sub>	-100	mA
Power dissipation	P <sub>D</sub>	200	mW
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-55 ~ 150	°C

## Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
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	30	-	-	-
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	-	-1.2	-1.6	V
Input voltage (OFF)	V <sub>I(OFF)</sub>	V <sub>O</sub> = -5V, I <sub>O</sub> = -0.1mA	-0.5	-0.82	-	V
Transition frequency	f <sub>T</sub> <sup>*</sup>	V <sub>O</sub> = -10V, I <sub>O</sub> = -5mA, f= 1MHz	-	200	-	MHz
Input current	I <sub>I</sub>	V <sub>I</sub> = -5V, I <sub>O</sub> = 0	-	-	-1.8	mA
Input resistor (Input to base)	R <sub>1</sub>	-	3.3	4.7	6.1	KΩ
Input resistor (Base to common)	R <sub>2</sub>	-	7	10	13	KΩ

\* : Characteristic of transistor only

### Electrical Characteristic Curves

Fig. 1 Pc - Ta

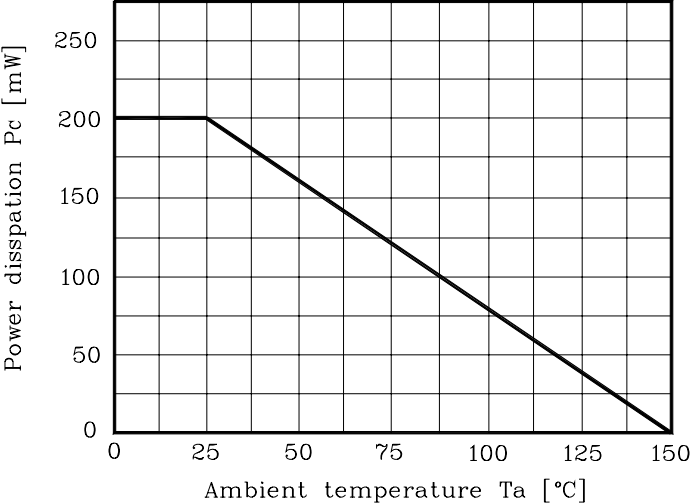


Fig. 2 I<sub>O</sub> - V<sub>I(ON)</sub>

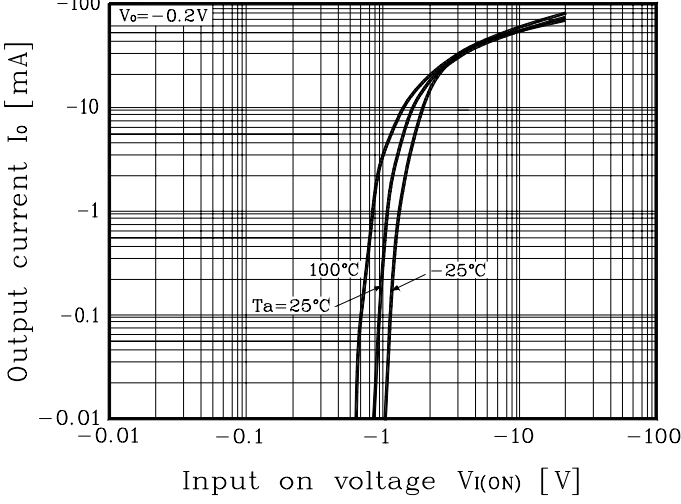


Fig. 3 I<sub>O</sub> - V<sub>I(OFF)</sub>

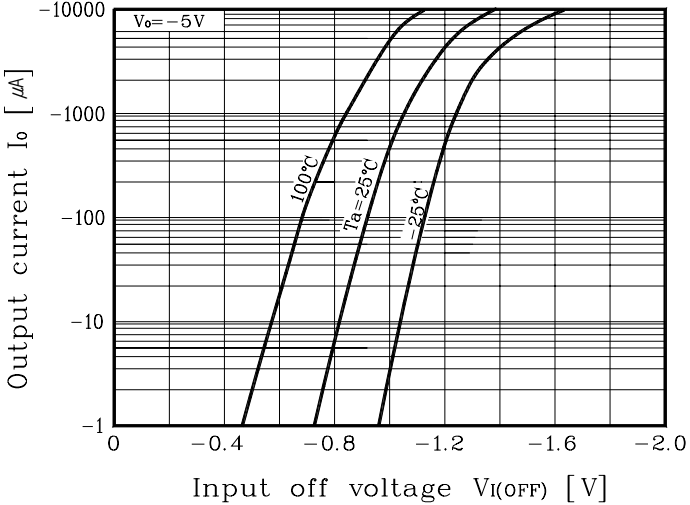
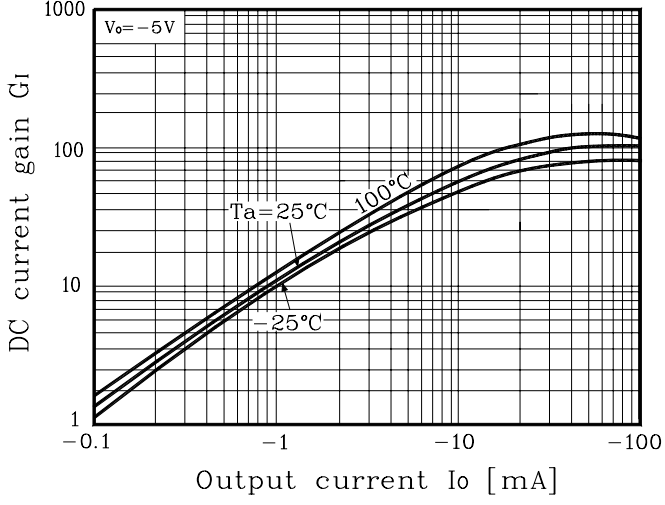
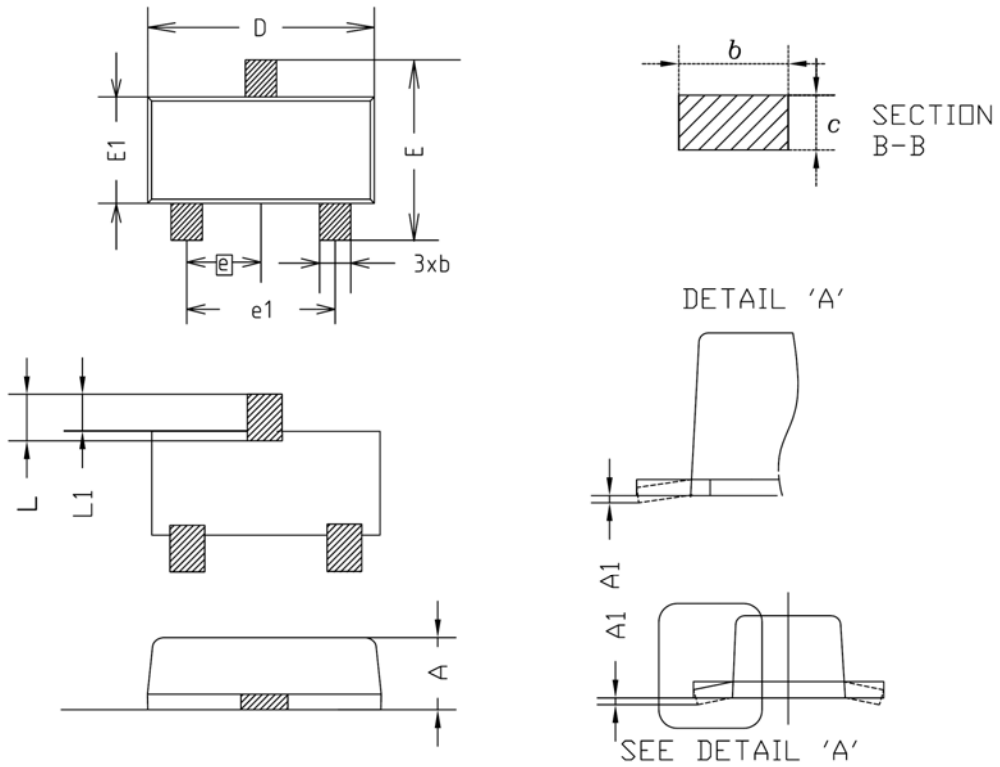


Fig. 4 G<sub>I</sub> - I<sub>O</sub>

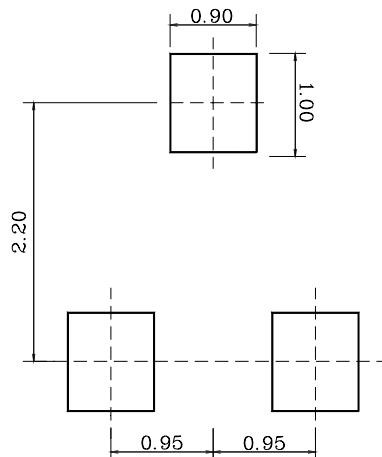


## Outline Dimension



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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