

## **SRA2201**

**PNP Silicon Transistor** 

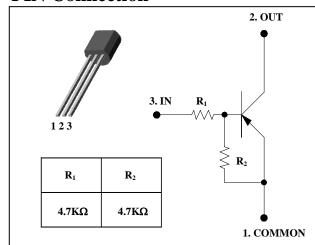
### **Descriptions**

- 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	
SRA2201	SRA2201	TO-92	

### **Absolute Maximum Ratings**

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	Vo	-50	V
Input voltage	V <sub>I</sub>	-20, 10	V
Output current	I <sub>o</sub>	-100	mA
Power dissipation	$P_{D}$	625	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.	Тур.	Max.	Unit
Output cut-off current	I <sub>O(OFF)</sub>	$V_0 = -50V, V_1 = 0$	-	-	-500	nA
DC current gain	G <sub>I</sub>	$V_0 = -5V$ , $I_0 = -10$ mA	30	55	-	-
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>	$V_0 = -0.2V$ , $I_0 = -5mA$	-	-1.5	-2.0	V
Input voltage (OFF)	V <sub>I(OFF)</sub>	$V_0 = -5V$ , $I_0 = -0.1$ mA	-1.0	-1.2	-	V
Transition frequency	f <sub>T</sub> *	$V_0 = -10V$ , $I_0 = -5$ mA, $f = 1$ MHz	-	200	-	MHz
Input current	I <sub>1</sub>	$V_1 = -5V, I_0 = 0$	-	-	-1.8	mA
Input resistor (Input to base)	R <sub>1</sub>	-	3.3	4.7	6.1	KΩ
Input resistor (Base to common)	$R_2$	-	3.3	4.7	6.1	KΩ

<sup>\* :</sup> Characteristic of transistor only

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### **Electrical Characteristic Curves**

Fig. 1  $P_D$  - Ta

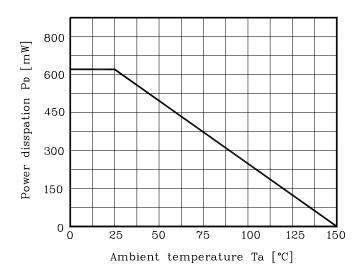


Fig. 2  $I_{\rm O}$  -  $V_{I(ON)}$ 

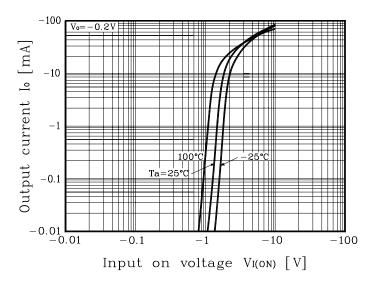


Fig. 3  $I_O$  -  $V_{I(OFF)}$ 

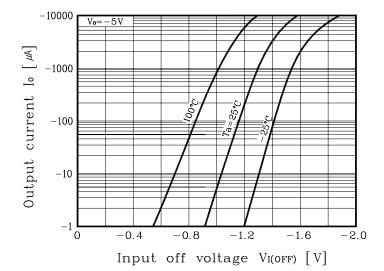
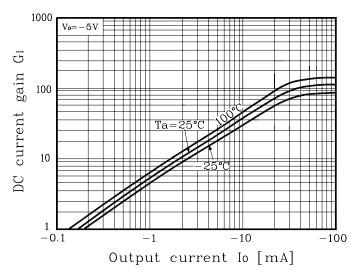
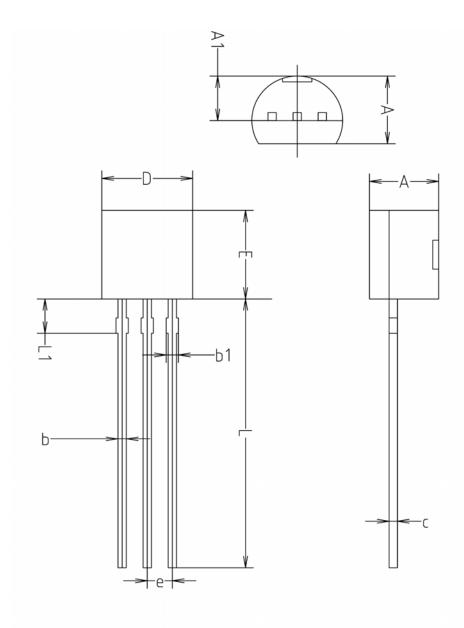


Fig. 4  $G_I$  -  $I_O$ 



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# **Outline Dimension**



	MILLMETERS(mm)			
SYMBOL	MINIMUM	NOMINAL	MAXIMUM	
Α	3.40	3.50	3.66	
A1	2.46	2.51	2.59	
b	0.39	0.44	0.53	
b1	0.39	_	0.63	
С	0.35	0.42	0.47	
D	4.48	4.60	4.70	
Ε	4.48	4.60	4.70	
е	1.17	1.27	1.37	
L	13.70	14.00	14.77	
L1	1.55	1.70	2.15	

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