

# **SRC1201N**

**NPN Silicon Transistor** 

unit : mm

#### Descriptions

- Switching application
- Interface circuit and driver circuit application

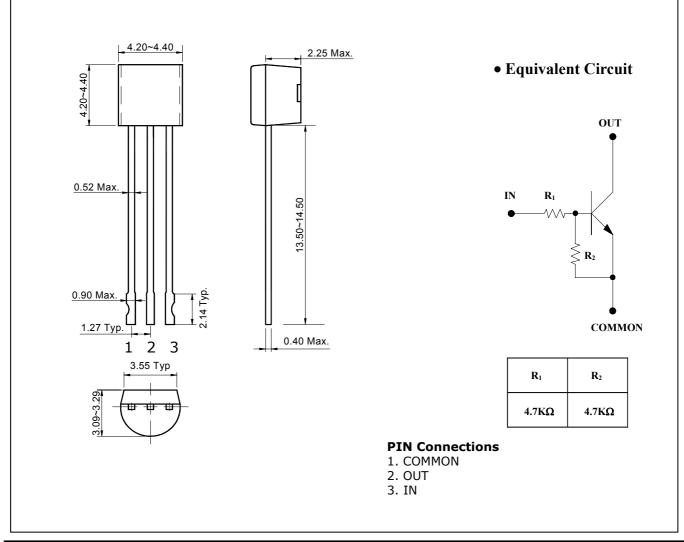
#### Features

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- Complementary pair with SRA2201N

### **Ordering Information**

Type NO.	Marking	Package Code		
SRC1201N	SRC1201	TO-92N		

### **Outline Dimensions**



## **SRC1201N**

### Absolute Maximum Ratings

Absolute Maximum Ratings		(Ta=25°C)		
Characteristic	Symbol	Rating	Unit	
Output voltage	Vo	50	V	
Input voltage	VI	20, -10	V	
Output current	I <sub>O</sub>	100	mA	
Power dissipation	P <sub>D</sub>	400	mW	
Junction temperature	Tյ	150	°C	
Storage temperature range	T <sub>stg</sub>	-55 ~ 150	°C	

### **Electrical Characteristics**

Electrical Characteristics					(Ta=25°C)	
Characteristic	Symbol	<b>Test Condition</b>	Min.	Тур.	Max.	Unit
Output cut-off current	$I_{O(OFF)}$	$V_0 = 50V, V_I = 0$	-	-	500	nA
DC current gain	GI	V <sub>0</sub> =5V, I <sub>0</sub> =10mA	30	55	-	-
Output voltage	V <sub>O(ON)</sub>	$I_0=10$ mA, $I_I=0.5$ mA	-	0.1	0.3	V
Input voltage (ON)	V <sub>I(ON)</sub>	V <sub>0</sub> =0.2V, I <sub>0</sub> =5mA	-	1.5	2.0	V
Input voltage (OFF)	$V_{I(OFF)}$	V <sub>0</sub> =5V, I <sub>0</sub> =0.1mA	1.0	1.2	-	V
Transition frequency	$f_{T}^{*}$	$V_0=10V$ , $I_0=5mA$ , f=1MHz	-	200	-	MHz
Input current	II	$V_{I}=5V, I_{O}=0$	-	-	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>	-	3.3	4.7	6.1	KΩ

\* : Characteristic of transistor only

### **SRC1201N**

### **Electrical Characteristic Curves**

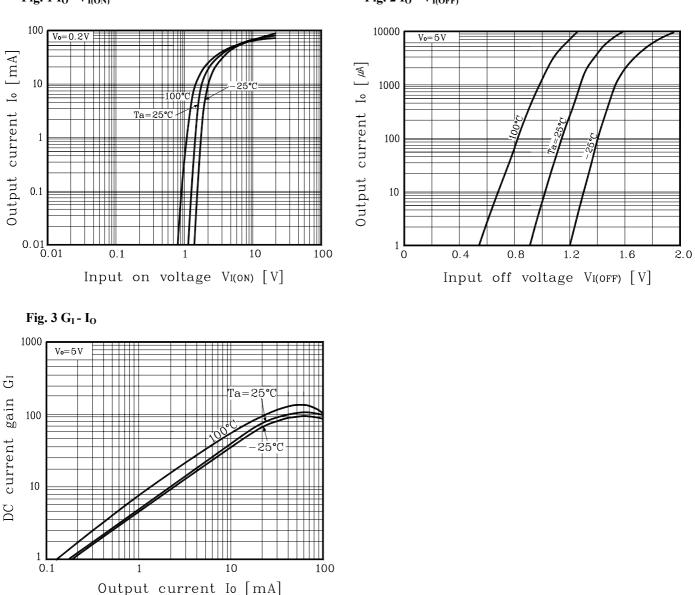


Fig. 1  $I_O - V_{I(ON)}$ 

Fig. 2 Io - VI(OFF)

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