

## **SRC1211N**

**NPN Silicon Transistor** 

#### **Descriptions**

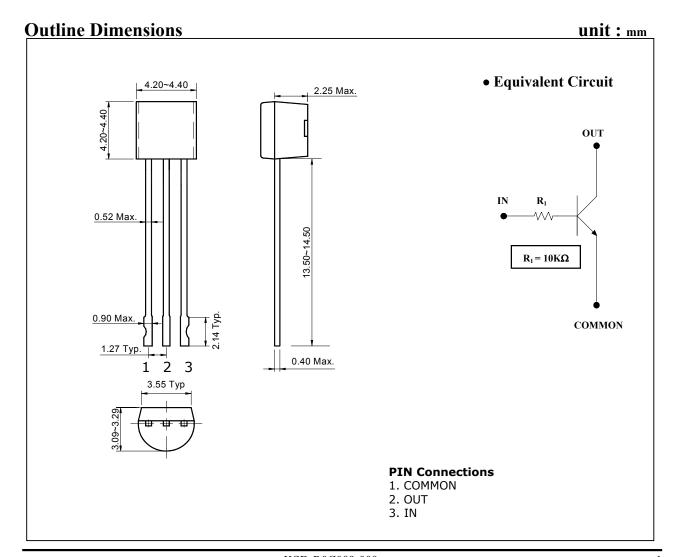
- Switching application
- Interface circuit and driver circuit application

#### **Features**

- With built-in bias resistor
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- Complementary pair with SRA2211N

### **Ordering Information**

Type NO.	Marking	Package Code	
SRC1211N	SRC1211	TO-92N	



KSD-R0C009-000

# **SRC1211N**

**Absolute Maximum Ratings** 

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	Vo	50	V
Input voltage	$V_{\rm I}$	30, -5	V
Output current	$I_{O}$	100	mA
Power dissipation	$P_{D}$	400	mW
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	$T_{stg}$	-55 ~ 150	°C

### **Electrical Characteristics**

(Ta=25°C)

Characteristic	Symbol	<b>Test Condition</b>	Min.	Typ.	Max.	Unit
Output cut-off current	$I_{O(OFF)}$	$V_0 = 50V, V_I = 0$	-	ı	500	nA
DC current gain	$G_{\mathrm{I}}$	$V_0=5V$ , $I_0=10$ mA	120	ı	-	ı
Output voltage	$V_{O(ON)}$	$I_O=10$ mA, $I_I=0.5$ mA	-	0.1	0.3	٧
Input voltage (ON)	$V_{I(ON)}$	V <sub>O</sub> =0.2V, I <sub>O</sub> =5mA	-	0.9	1.4	٧
Input voltage (OFF)	$V_{I(OFF)}$	$V_0 = 5V$ , $I_0 = 0.1$ mA	0.3	0.55	-	٧
Transition frequency	$f_T^*$	$V_0=10V$ , $I_0=5mA$ , $f=1MHz$	-	200	-	MHz
Input current	$I_{I}$	$V_I=5V$ , $I_O=0$	-	1	0.88	mA
Input resistor (Input to base)	$R_1$	-	7	10	13	ΚΩ

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

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#### **Electrical Characteristic Curves**

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

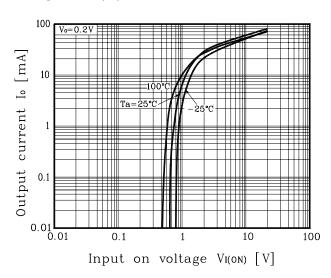


Fig. 2  $I_O - V_{I(OFF)}$ 

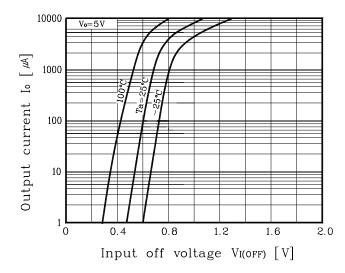
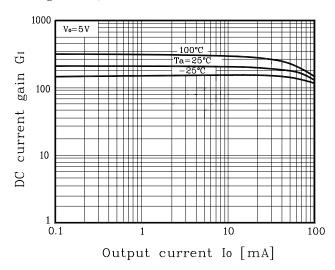


Fig. 3 G<sub>1</sub> - I<sub>0</sub>



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