

NPN Silicon Transistor

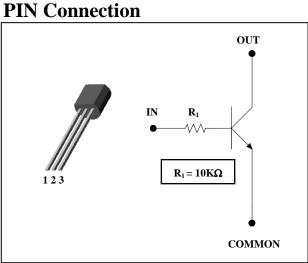
 $(Ta=25^{\circ}C)$

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
- High packing density



Ordering Information

Type NO.	Marking	Package Code		
SRC1211	SRC1211	TO-92		

Absolute Maximum Ratings

	(14-20 0)			
Characteristic	Symbol	Rating	Unit	
Output voltage	Vo	50	V	
Input voltage	VI	30, -5	V	
Output current	Ι _Ο	100	mA	
Power dissipation	P _D	625	mW	
Junction temperature	ΤJ	150	°C	
Storage temperature range	T _{stg}	-55 ~ 150	°C	

Electrical Characteristics

Electrical Characteristics						(Ta=25°C)	
Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit	
Output cut-off current	I _{O(OFF)}	$V_0 = 50V, V_1 = 0$	-	-	500	nA	
DC current gain	Gı	$V_0 = 5V$, $I_0 = 10mA$	120	-	-	-	
Output voltage	V _{O(ON)}	$I_0 = 10mA$, $I_1 = 0.5mA$	-	0.1	0.3	V	
Input voltage (ON)	V _{I(ON)}	$V_0 = 0.2V$, $I_0 = 5mA$	-	0.9	1.4	V	
Input voltage (OFF)	V _{I(OFF)}	$V_0 = 5V, I_0 = 0.1mA$	0.3	0.55	-	V	
Transition frequency	f _T *	$V_0=10V$, $I_0=5mA$, f=1MHz	-	200	-	MHz	
Input current	I ₁	$V_1 = 5V, I_0 = 0$	-	-	0.88	mA	
Input resistor (Input to base)	R ₁	-	7	10	13	KΩ	

* : Characteristic of transistor only

Electrical Characteristic Curves

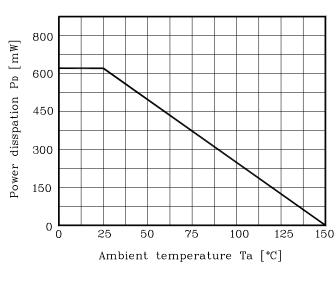
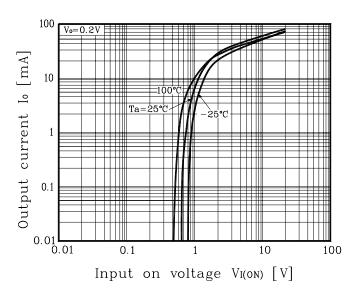


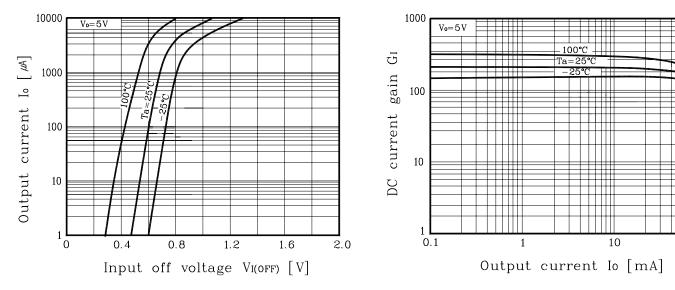
Fig. 1 P_D - Ta

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



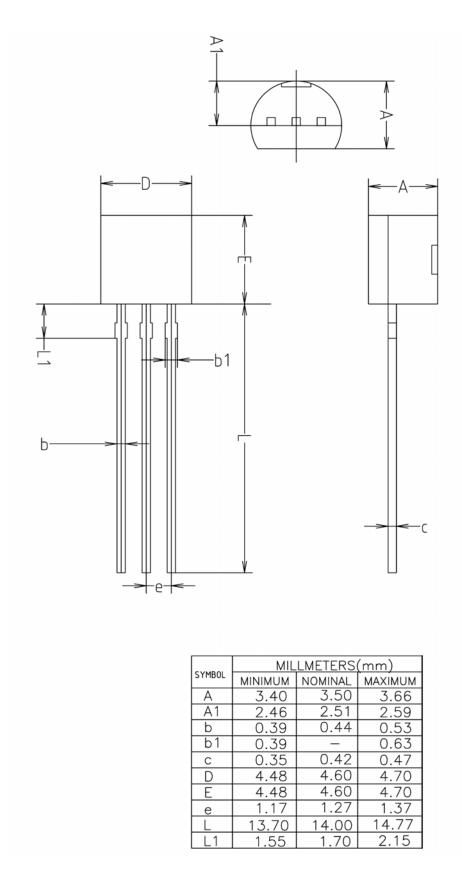
 $Fig. \ 3 \ I_O - V_{I(OFF)}$





100

Outline Dimension



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