

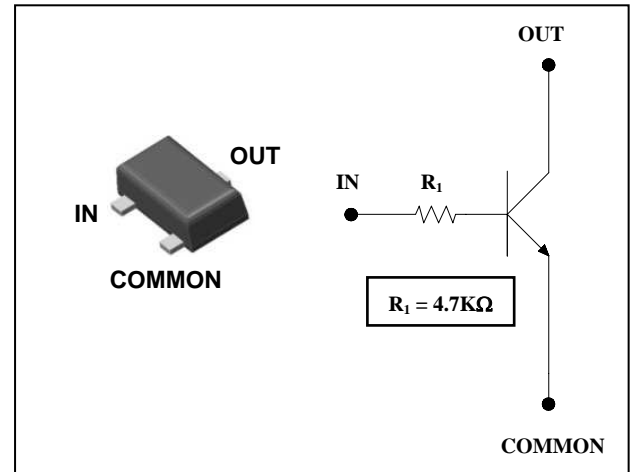
## Descriptions

- 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

## PIN Connection



## Ordering Information

Type NO.	Marking	Package Code
SRC1210UF	<div style="display: flex; align-items: center; justify-content: center;"> <span style="border: 1px solid black; padding: 2px;">RA</span> <span style="margin-left: 5px;">□</span> </div> <div style="display: flex; justify-content: space-around; width: 100px;"> <span>①</span> <span>②</span> </div>	SOT-323F
① Device Code ② Year&Week Code		

## Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	$V_O$	50	V
Input voltage	$V_I$	20, -5	V
Output current	$I_O$	100	mA
Power dissipation	$P_D$	200	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.	Typ.	Max.	Unit
Output cut-off current	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC current gain	$G_I$	$V_O=5V, I_O=10mA$	120	-	-	-
Output voltage	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	0.8	1.2	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.3	0.55	-	V
Transition frequency	$f_T^*$	$V_O=10V, I_O=5mA, f=1MHz$	-	200	-	MHz
Input current	$I_I$	$V_I=5V, I_O=0$	-	-	1.8	mA
Input resistor (Input to base)	$R_1$	-	3.3	4.7	6.1	KΩ

\* : Characteristic of transistor only

Electrical Characteristic Curves

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

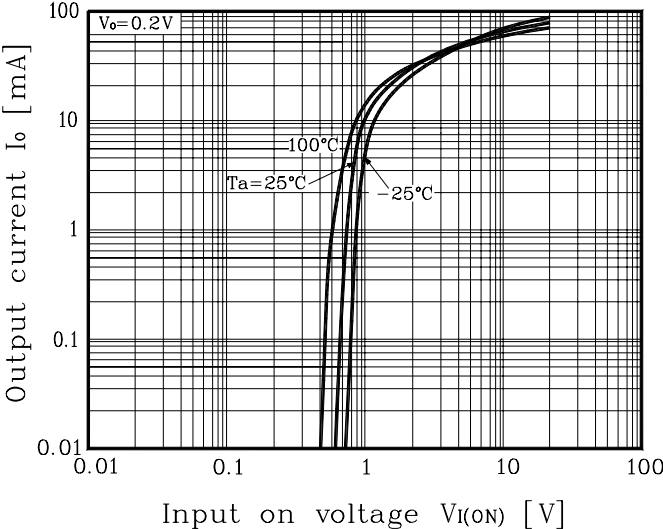


Fig. 2  $I_O - V_{I(OFF)}$

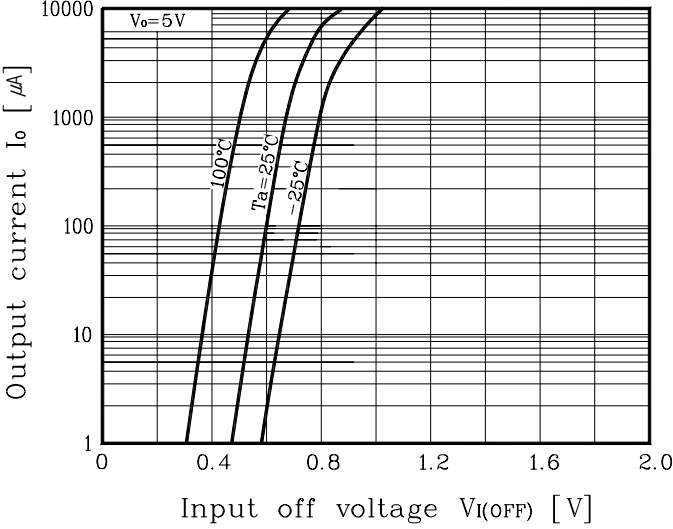
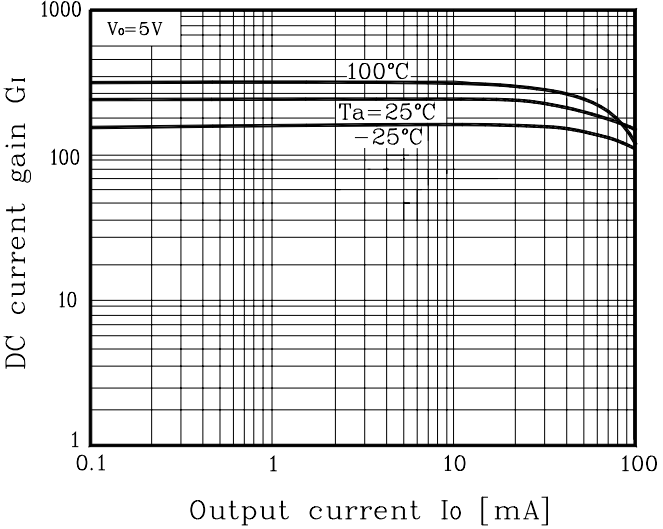
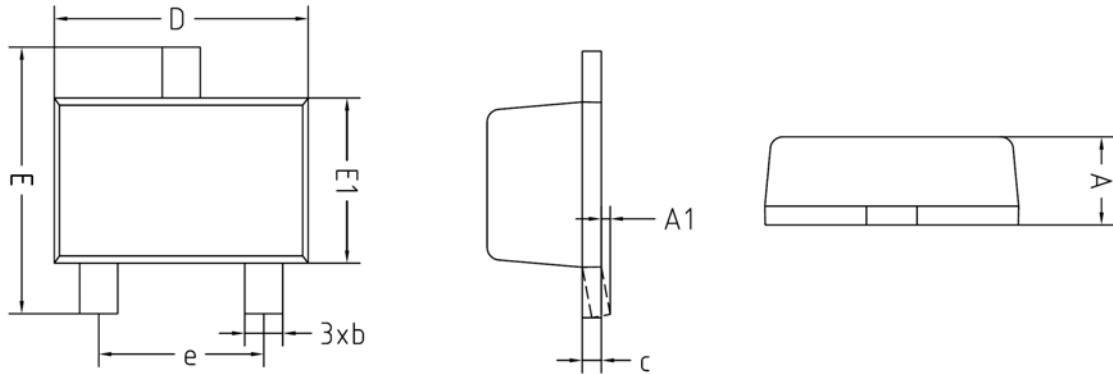


Fig. 3  $G_I - I_O$

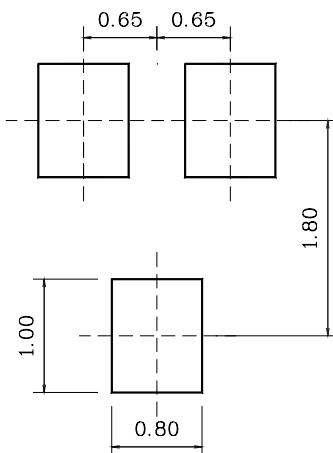


## Outline Dimension



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	0.60	-	0.80	
A1	0.00	-	0.10	
b	0.30	-	0.40	
c	0.08	-	0.16	
D	1.90	2.00	2.10	
E	1.95	2.10	2.25	
E1	1.20	1.30	1.40	
e	1.30BSC			

※Recommend PCB solder land [Unit: mm]



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