

SRA2205SF

PNP Silicon Transistor

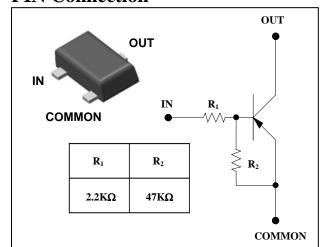
Descriptions

- 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
SRA2205SF	<u>RA5</u> □ ① ②	SOT-23F

1) Device Code 2) Year & Week Code

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	Vo	-50	V
Input voltage	V _I	-15, 5	V
Output current	Io	-100	mA
Power dissipation	P _D	200	mW
Junction temperature	TJ	150	°C
Storage temperature range	T _{stg}	-55 ~ 150	°C

Electrical Characteristics

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

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	$V_0 = -5V$, $I_0 = -10$ mA	80	200	-	-
Output voltage	V _{O(ON)}	I _O =-10mA, I _I =-0.5mA	-	-0.1	-0.3	V
Input voltage (ON)	V _{I(ON)}	$V_0 = -0.2V$, $I_0 = -5mA$	-	-	-1.1	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_0 = -5V$, $I_0 = -0.1$ mA	-0.5	-	-	V
Transition frequency	f _T *	$V_0 = -10V$, $I_0 = -5mA$, $f = 1MHz$	-	200	-	MHz
Input current	I_1	$V_1 = -5V, I_0 = 0$	-	-	-3.6	mA
Input resistor (Input to base)	R ₁	-	1.54	2.2	2.86	KΩ
Input resistor (Base to common)	R_2	-	33	47	61	KΩ

^{* :} Characteristic of transistor only

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Electrical Characteristic Curves

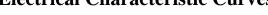
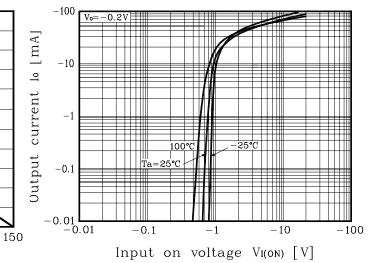




Fig. 2 I_{O} - $V_{I\left(ON\right)}$



50

75

Ambient temperature Ta [°C]

100

125

25

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

Fig. 1 Pc - Ta

150

100

50

0

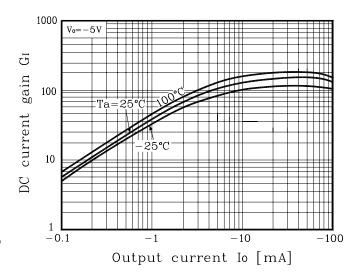
-10000

0

Output current Io [#] -1000 -100-10-2.0

-0.8Input off voltage Vi(off) [V]

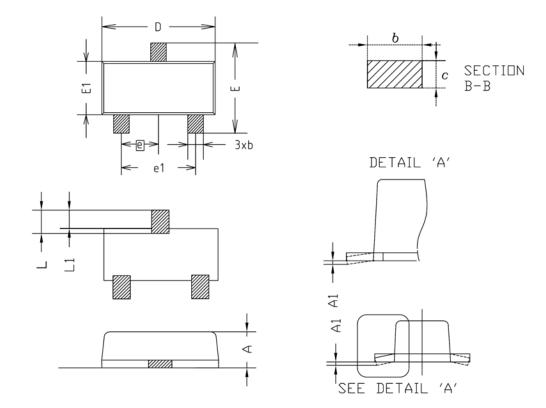
Fig. 4 G_I - I_O



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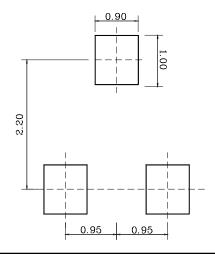
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Outline Dimension



SYMBOL	1	NOTE			
STADUL	MINIMUM	NDMINAL	MAXIMUM	NUIL	
Α	0.80	0.90	1.00		
A1	0.00	-	0.10		
b	0.35	0.40	0.45		
C	0.10	0.15	0.20		
D	2.80	2.90	3.00		
E	2.30	2.40	2.50		
E1	1.50	1.60	1.70		
е	0.95BSC				
e1	1.80	1.90	2.00		
L	0.48	0.58	0.68		
L1	0.30	-	0.50		

*Recommend PCB solder land [Unit: mm]



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