

SRA2205S

PNP Silicon Transistor

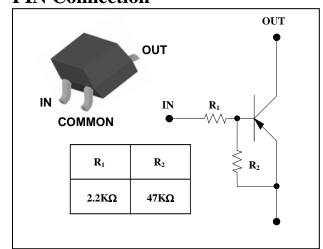
Descriptions

- 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

<u>RA5</u> □ ②	SOT-23

①Device Code ②Year&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	m A
Power dissipation	P_D	200	m W
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Output cut-off current	I _{O(OFF)}	$V_0 = -50 V, V_1 = 0$	-	-	-500	nA
DC current gain	Gı	$V_0 = -5V$, $I_0 = -10 \text{ m A}$	80	200	-	-
Output voltage	V _{O(ON)}	$I_{O} = -10 \text{ m A}, I_{I} = -0.5 \text{ m A}$	-	-0.1	-0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_0 = -0.2V$, $I_0 = -5 \text{ m A}$	-	-	-1.1	V
Input voltage (OFF)	V _{I (OFF)}	$V_O = -5V$, $I_O = -0.1 \text{mA}$	-0.5	-	-	V
Transition frequency	f _T *	$V_O = -10V$, $I_O = -5 \text{ m A}$, $f = 1 \text{ MHz}$	-	200	-	MHz
Input current	I ₁	$V_1 = -5 V$, $I_0 = 0$	-	-	-3.6	m A
Input resistor (Input to base)	R ₁	-	1.54	2.2	2.86	K Ω
Input resistor (Base to common)	R_2	-	33	47	61	K Ω

^{* :} Characteristic of transistor only

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Electrical Characteristic Curves



250 200 150

75

Ambient temperature Ta [°C]

100

125

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

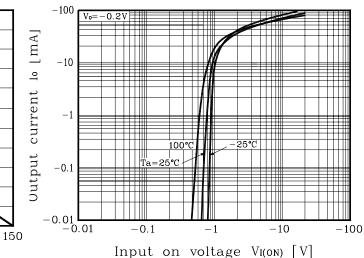


Fig. 3 I_O - $V_{I(OFF)}$

25

50

Fig. 1 Pc - Ta

Power disspation Pc [mW]

50

0

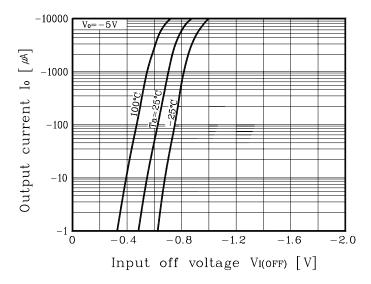
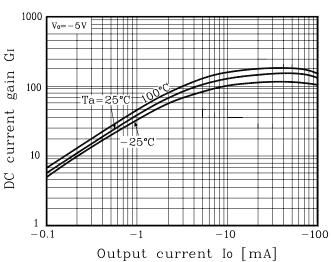
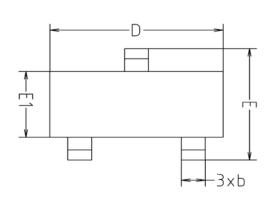


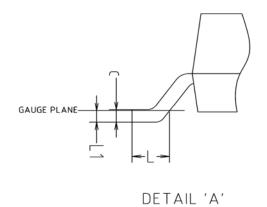
Fig. 4 G_I - I_O

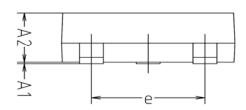


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Outline Dimension



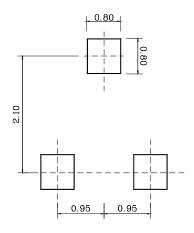






SYMBOL MILLIMETERS				NOTE	
3111000	MINIMUM	NOMINAL	MAXIMUM	11012	
A1	0.00	-	0.10		
A2	0.82	-	1.02		
Ь	0.39	0.42	0.45		
С	0.09	0.12	0.15		
D	2.80	2.90	3.00		
E	2.20	2.40	2.60		
E1	1.20	1.30	1.40		
е					
L	0.20	-	-		
L1					

*Recommend PCB solder land [Unit: mm]



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