

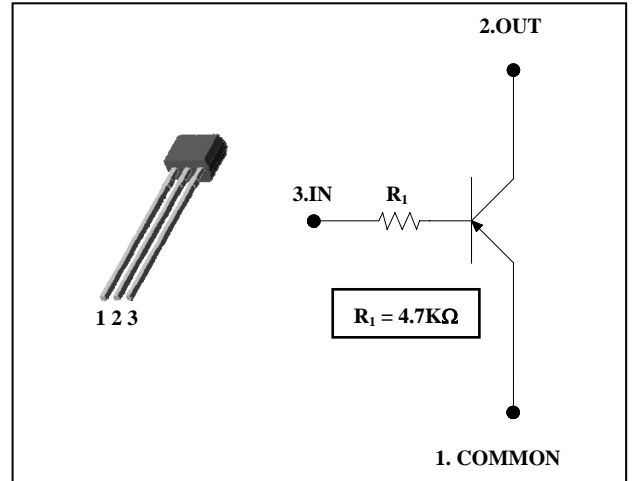
## Descriptions

- 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
SRA2210M	2210	TO-92M

## 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	$P_D$	400	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  $P_c - T_a$

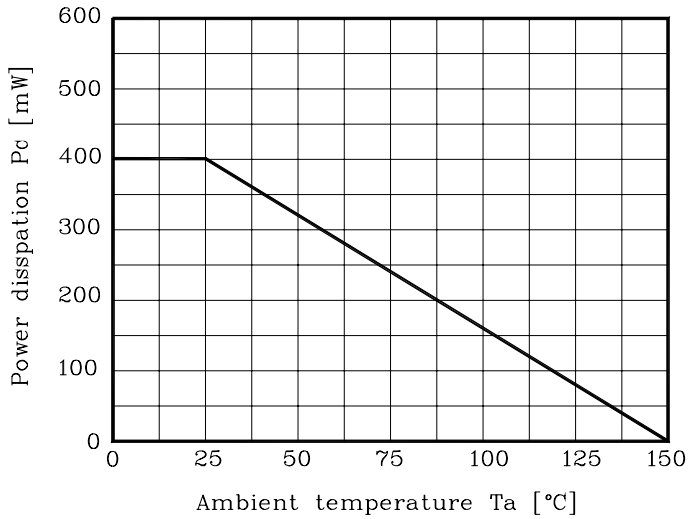


Fig. 2  $I_o - V_{I(ON)}$

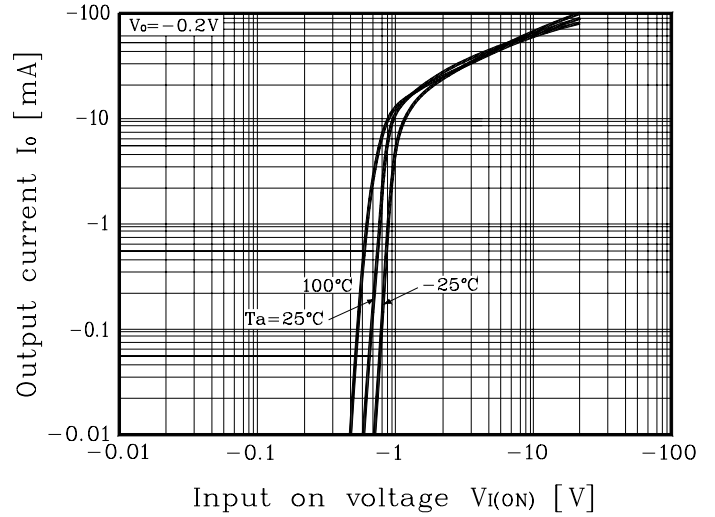


Fig. 3  $I_o - V_{I(OFF)}$

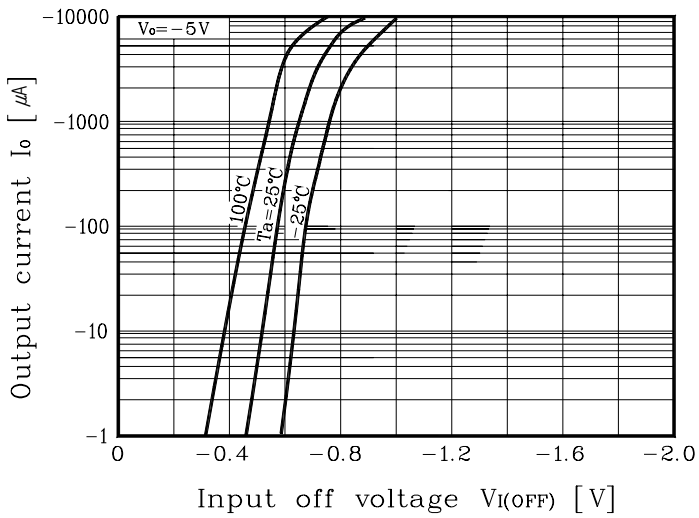
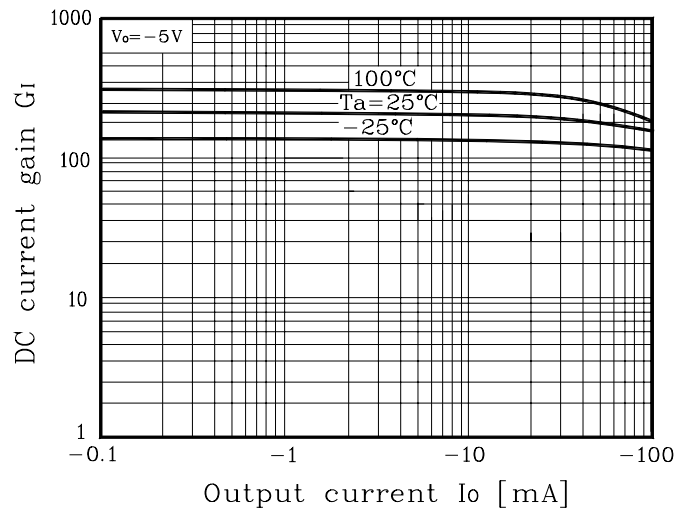
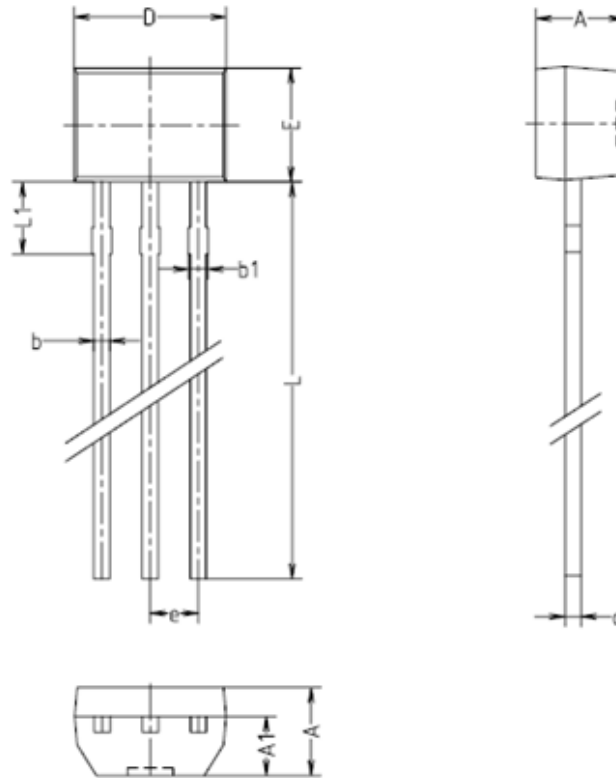


Fig. 4  $G_I - I_o$



Outline Dimension



SYMBOL	TO-92M		
	MINIMUM	NOMINAL	MAXIMUM
A	2.25	2.30	2.35
A1	1.50	1.55	1.60
b	0.40	0.42	0.44
b1	0.40	-	0.50
c	0.40	0.42	0.44
D	3.93	4.00	4.07
E	2.93	3.00	3.07
e	1.17	1.27	1.37
L	14.30	14.50	14.70
L1	2.05	2.15	2.25

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