KODENSHI AUK

SRC1207M

NPN Silicon Transistor

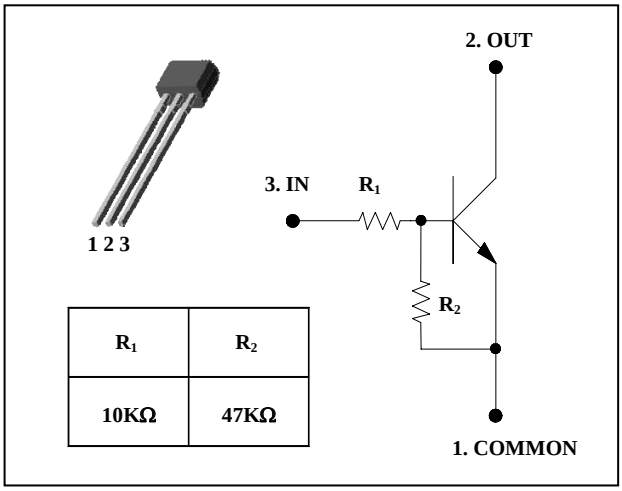
Descriptions

- 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



R_1	R_2
10KΩ	47KΩ

Ordering Information

Type NO.	Marking	Package Code
SRC1207M	1207	TO-92M

Absolute Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	V_O	50	V
Input voltage	V_I	30,-6	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	80	150	-	-
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	-	-	1.8	V
Input voltage (OFF)	$V_{I(OFF)}$	V_O= 5V, I_O= 0.1mA	0.5	-	-	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	-	-	0.88	mA
Input resistor (Input to base)	R_1	-	7	10	13	KΩ
Input resistor (Base to common)	R_2	-	33	47	61	KΩ

* : Characteristic of transistor only

Electrical Characteristic Curves

Fig. 1 P_D - Ta

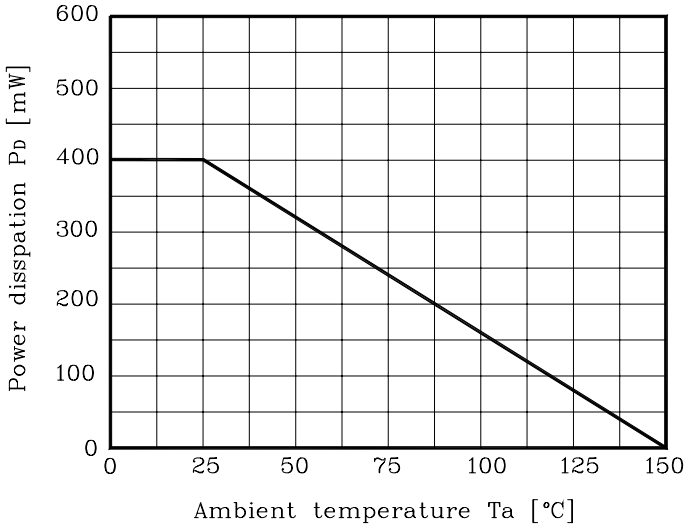


Fig. 2 I_O - $V_{I(ON)}$

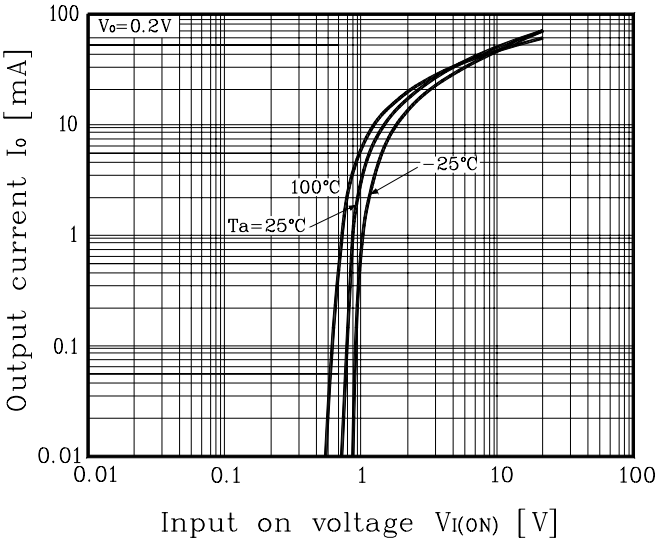


Fig. 3 I_O - $V_{I(OFF)}$

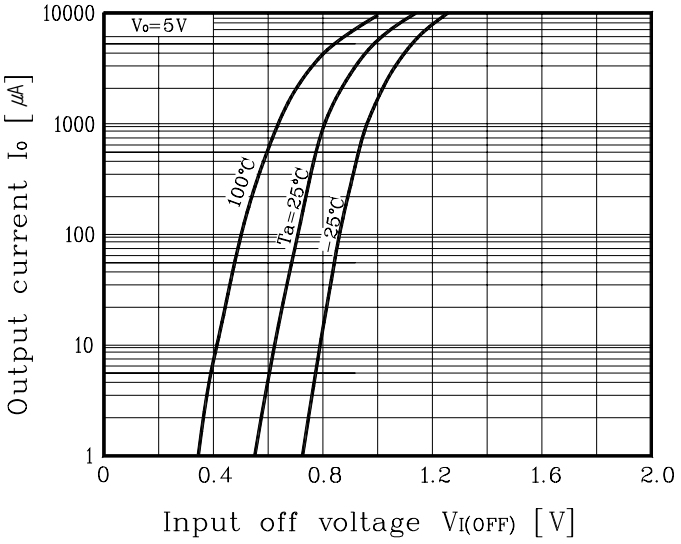
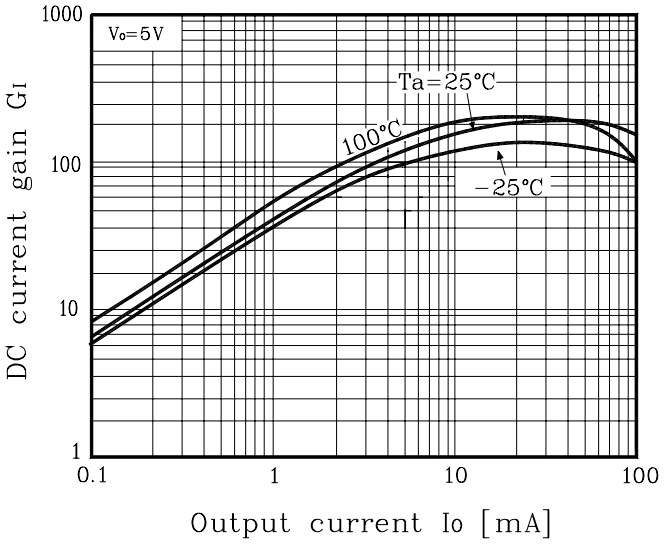
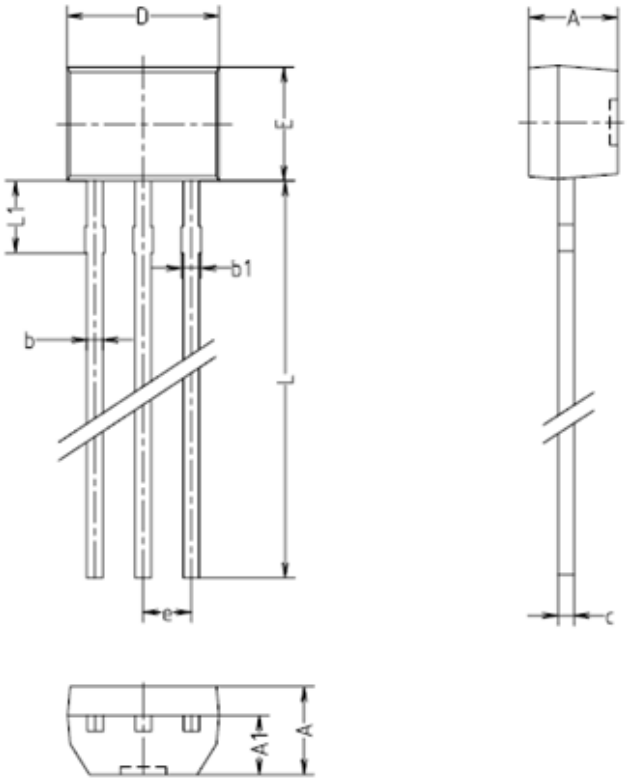


Fig. 4 G_I - I_O



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

The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..

Specifications mentioned in this publication are subject to change without notice.