

Descriptions

- Switching application
- Interface circuit and driver circuit application

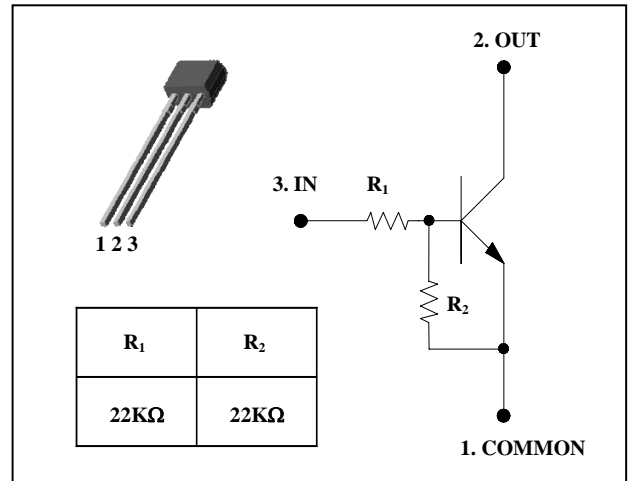
Features

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- High packing density

Ordering Information

Type NO.	Marking	Package Code
SRC1203M	1203	TO-92M

PIN Connection



Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	V _O	50	V
Input voltage	V _I	40, -10	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	70	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	-	2.1	3.0	V
Input voltage (OFF)	V _{I(OFF)}	V _O =5V, I _O =0.1mA	1.0	1.2	-	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	-	-	0.36	mA
Input resistor (Input to base)	R ₁	-	15.4	22	28.6	KΩ
Input resistor (Base to common)	R ₂	-	15.4	22	28.6	KΩ

* : Characteristic of transistor only

Electrical Characteristic Curves

Fig. 1 $P_D - T_a$

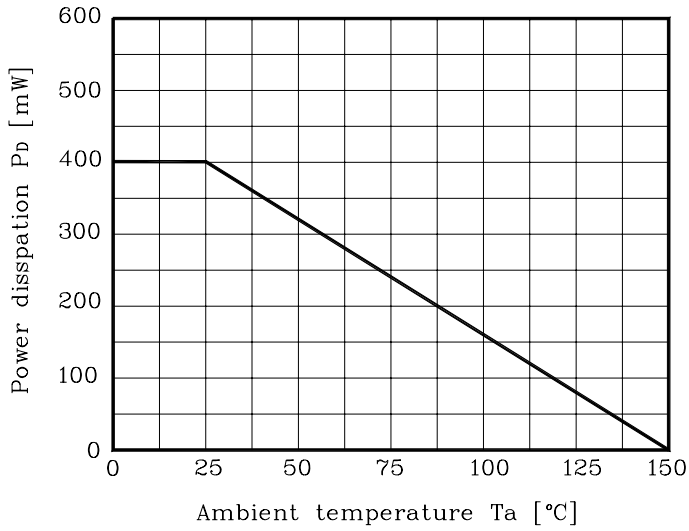


Fig. 2 $I_O - V_{I(ON)}$

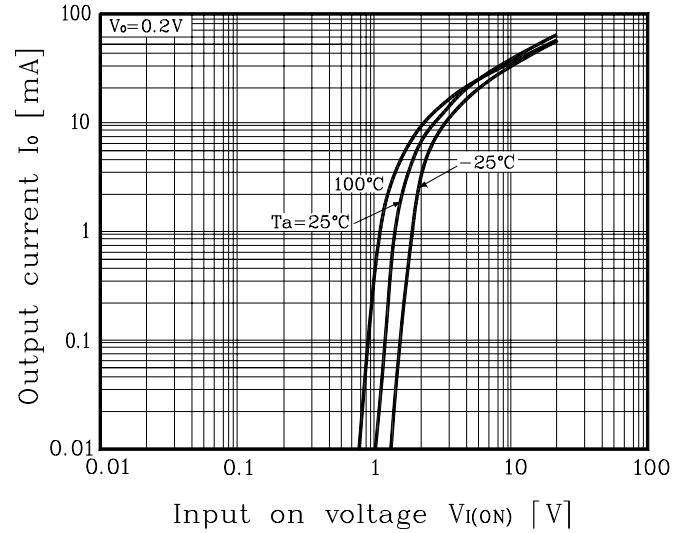


Fig. 3 $I_O - V_{I(OFF)}$

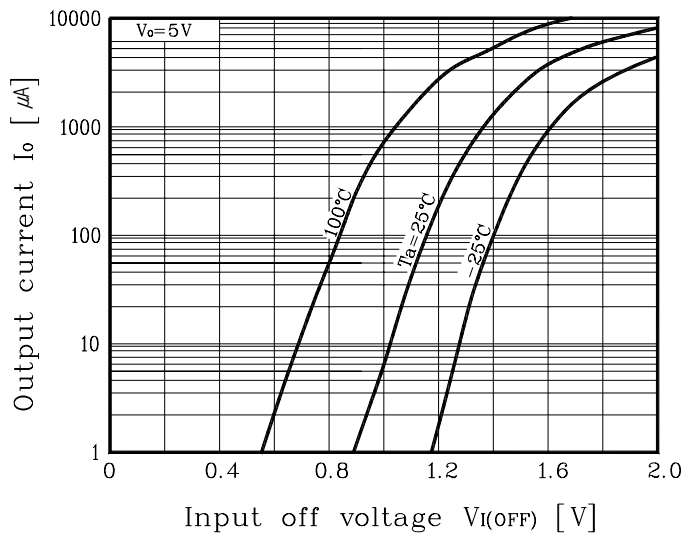
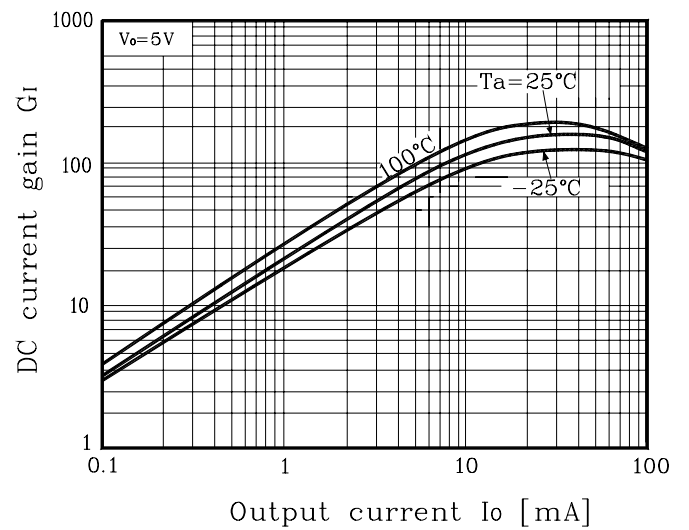
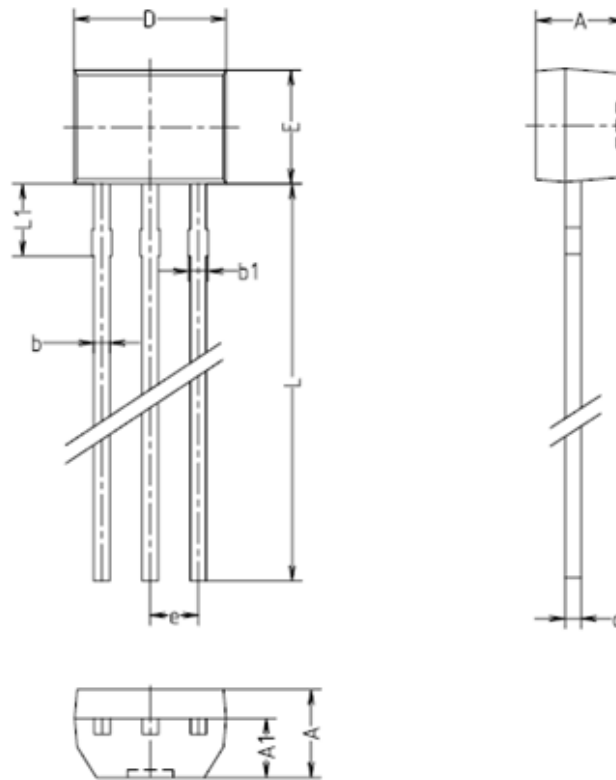


Fig. 4 $G_I - I_O$



Outline Dimension



SYMBOL	TQ-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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