KRC1206M

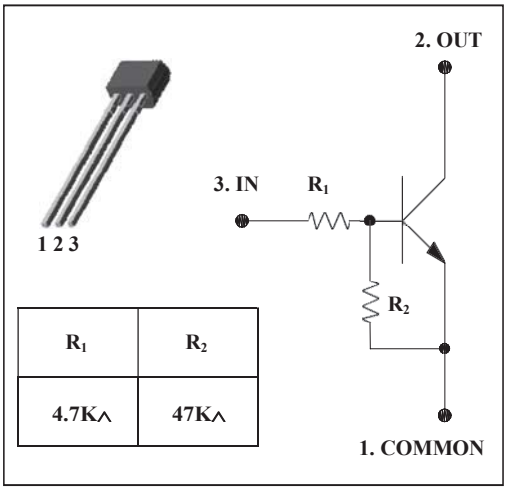
TO-92M Plastic-Encapsulate Transistors

FEATURES

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

MECHANICAL DATA

- Case style:TO-92M molded plastic
- Mounting position:any



R_1	R_2
4.7KΩ	47KΩ

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

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 Specification (@T_A=25unless otherwise specified)

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	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_O=0.2V, I_O=5mA	-	0.9	1.3	V
Input voltage (OFF)	$V_{I(OFF)}$	V_O=5V, I_O=0.1mA	0.5	0.65	-	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
Input resistor (Base to common)	R_2	-	33	47	61	KΩ

* : Characteristic of transistor only

RATINGSAND CHARACTERISTIC CURVES

Fig. 1 P_D - Ta

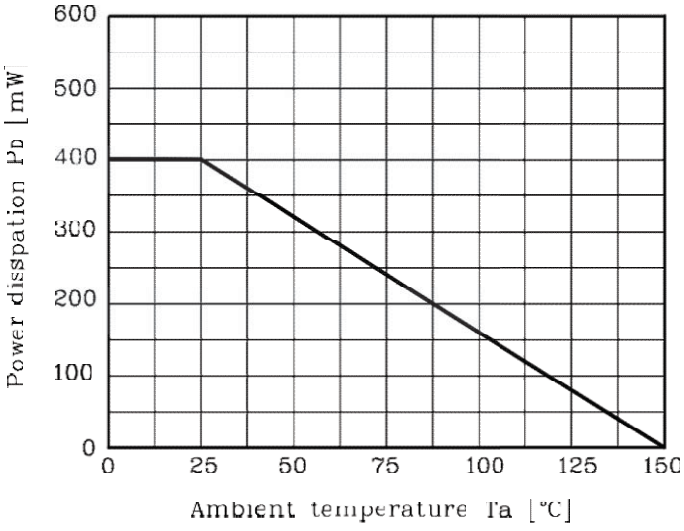


Fig. 2 I_O - $V_{I(ON)}$

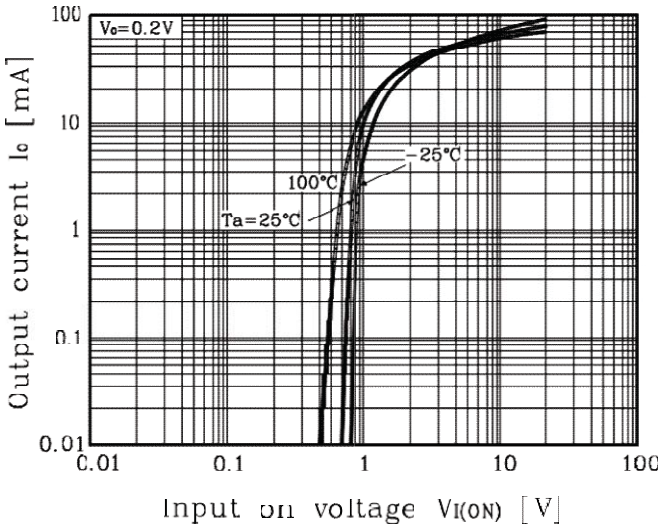


Fig. 3 I_O - $V_{I(OFF)}$

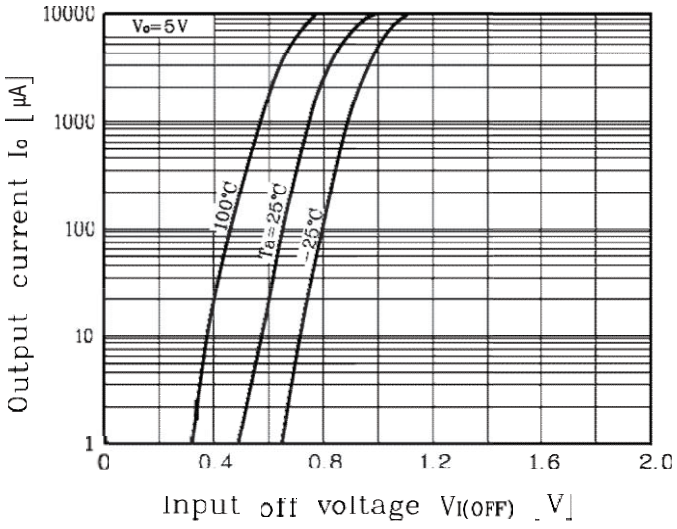
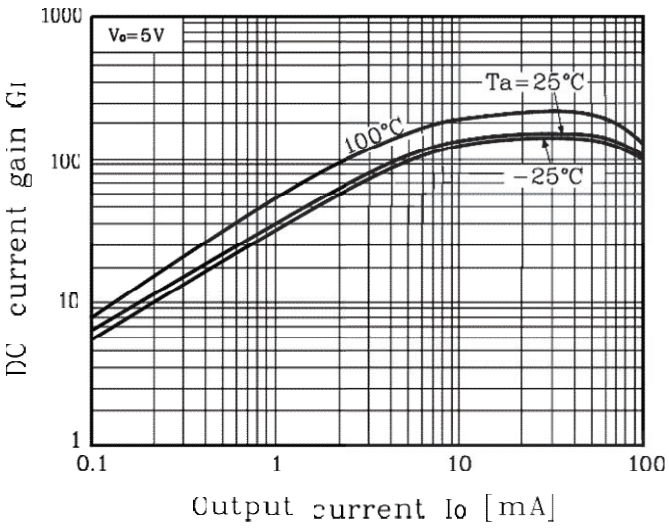
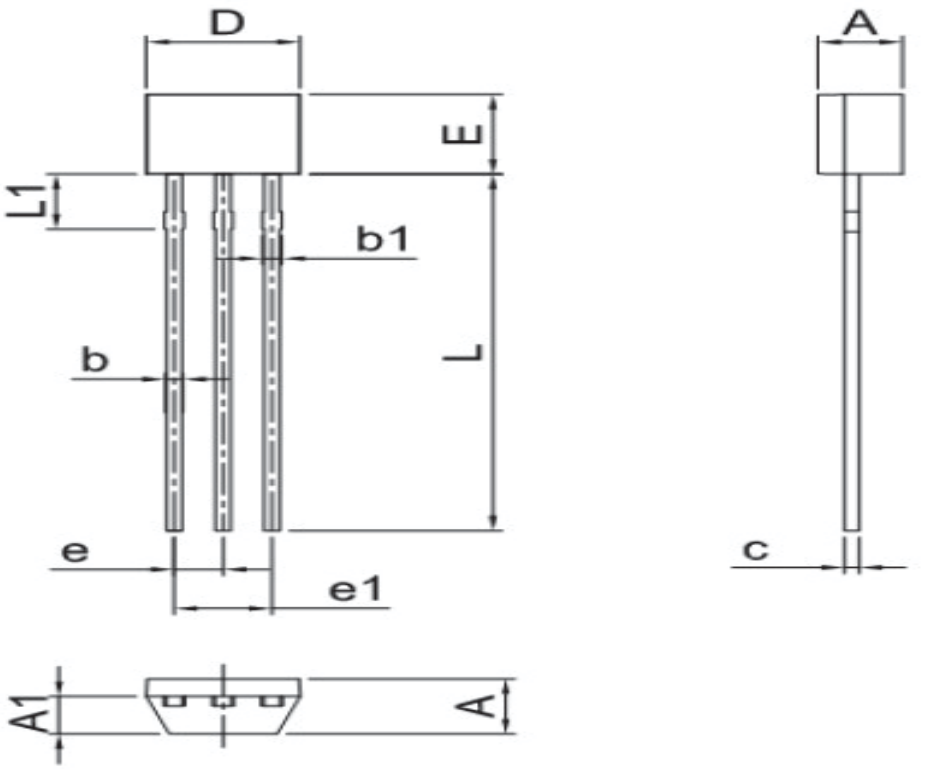


Fig. 4 G_I - I_O





Symbol	TO-92 M		
	Min.	Typ	Max.
A	2.10	2.20	2.30
A1	1.30	1.50	1.70
b	0.40	0.45	0.50
b1	0.50	0.55	0.60
c	0.35	0.40	0.45
D	3.80	4.00	4.20
E	2.80	3.00	3.20
e	1.17	1.27	1.37
e1	2.34	2.54	2.64
L	12.80	13.30	13.80
L1	2.00	2.20	2.40